



# SOLAR FIGURES 2010

Our reporting on sustainable corporate management is integrated into the SOLARWORLD annual group report 2010. The present details on the sustainability performance 2010 embrace the extensive disclosure along:

- The framework of the Global Reporting Initiative (GRI),
- The Key Performance Indicators of the European Federation of Financial Analysts Societies (EFFAS) Commission on ESG and the Deutschen Vereinigung für Finanzanalyse und Asset Management (DVFA) Commission on Non-Financials (CNF) as well as
- The provisions of the United Nations Global Compact (GC).

# SO2 CONTENT

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#### FOR YOUR GUIDANCE

- © Cross reference to text passages in the details on sustainability performance 2010 p. S00//
- → Cross reference to the annual group report 2010 p. 000//
- @ Cross reference to charts in the details on sustainability performance 2010 p. S00//
- @ www.internetlink.com //

# DETAILS ON SUSTAINABILITY PERFORMANCE

**S03** 

# DISCLOSURE (GLOBAL REPORTING INITIATIVE, GLOBAL COMPACT, EFFAS/DVFA)

### (1) GLOBAL REPORTING INITIATIVE (CATEGORIZATION AND INDEX)

PPL	ICATION LEVELS		С	C+	В	B+	A	<b>A</b> +
	G3 Profile Disclosures	OUTPUT	Report on:  1.1 2.1-2.10 3.1-3.8, 3.10-3.12 4.1-4.4, 4.11-4.15		Report on: all criteria listed for Level C plus: 1.2 3.9, 3.13 4.5–4.13, 4.16–4.17		Report on: same requirements as for Level B	
REQUIRED CRITERIA	G3 Management Approach Disclosures	OUTPUT	No disclosure of Management Approach.	PORT IS EXTERNALLY CONFIRMED	Management Approach disclosed for each Indicator Category.	IRT IS EXTERNALLY CONFIRMED	Management Approach disclosed for each Indicator Category.	PORT IS EXTERNALLY CONFIRMED
	G3 Performance Indicators & Sector Supplement Performance Indicators	OUTPUT	Report on a minimum of 10 Performance Indicators, including at least one from each of: social, economic and environment.	IF REPO	Report on a minimum of 20 Performance Indicators, including at least one from each of: economic, environment, human rights, labor, society, product responsibility.	IF REPORT	Report on each core G3 and Sector Supplement in- dicator* with due regard to the Materiality Principle by either: a) reporting on the indicator, or b) explaining the reason for its omission.	IF REPO

<sup>\*</sup> Where final version of sector supplement is available

STEP 1	Self categorization A+
STEP 2	The report segments "KPIs for ESG (key performance indicators of EFFAS/DVFA)" and "Performance Indicators" underwent an audit review by BDO AG Wirtschaftsprüfungsgesellschaft. BDO AG Wirtschaftsprüfungsgesellschaft also takes account of information from audits according to ISO 9001 and 14001. Unless otherwise indicated, the GRI data refer to the SOLARWORLD Group.
STEP 3	Application Level Check by GRI.

### S04 @ GRI INDEX

Application Level A+, audit review by BDO AG Wirtschaftsprüfungsgesellschaft The GRI index according to the latest state of the art is available at @ <u>annualgroupreport2010.solarworld.de/further-details</u>//

Disclo	osure to GRI standard	Information/cross-reference	Status
1.1	Statement from the most senior decision-maker	<u>⊕ Letter by the Chairman</u> • p. 009//	•
1.2	Key impacts, risks and opportunities	⊕ Report on expected development with its major opportunities and risks • p. 108 // Corporate management and control • p. 030 // Human resources 2010 • p. 100 // Target achievement 2009 and 2010 and targets for 2011 + • p. 022 // @ annualgroupreport 2010. solarworld.de/ further-details //	•
2.1	Name of organization	SOLARWORLD AG	•
2.2	Brands, products, services	⊕ Important products, services and business processes • p. 035 //	•
2.3	Operational structure	⊕ Group structure and segments • p. 034//	•
2.4	Location of the organization's headquarters	Bonn, Deutschland  → Business fields continued unchanged • p. 034//	•
2.5	Countries where the organization operates	→ Worldwide locations of the group • p. 037//	•
2.6	Nature of ownership		•
2.7	Markets served	→ Market position // influencing factors • p. 037//	•
2.8	Scale of organization	<u>⊕ Earnings, finance and assets situation</u> • p. 089// <u>Human resources 2010</u> • p. 100//	•
2.9	Significant changes in size, structure or ownership	→ Group structure and segments • p. 034 // Legal structure of the group changed in the year under review • p. 034 // Future legal goup stucture • p. 136 //	•
2.10	Awards		•
3.1	Reporting period	Calendar year 2010 (01/01/2010 – 12/31/2010) = business year 2010	•
3.2	Date of last report, if applicable	Calendar year 2009 (01/01/2009 – 12/31/2009) = business year 2009	•
3.3	Reporting cycle (annual, biannual, etc.)	Annual	•

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3.4	Contact for questions on report or its contents	IR department
3.5	Process for defining report content	
3.6	Reporting boundary	
.7	Limitations on scope of reporting	
8.8	Joint ventures, subsidiaries, leased facilities, outsourced operations	⊚ <u>3.6</u> • p. S26 //
.9	Data measurement techniques	GRI indicator protocols were used for reporting.
.10	Restatement of information from earlier reports	⊚ <u>3.10</u> • p. S28//
.11	Changes in reporting scope, boundary or measuring methods	⊚ <u>3.11</u> • p. S28//
.12	GRI index	The present table @ <u>GRI Index</u> • p. S04 //
.13	External assurance	
1	Governance structure of the organization	→ Steering and control unchanged in 2010 • p. 040//
.2	Indication whether the Chair of the highest governance body is at the same time the Managing Director	→ Steering and control unchanged in 2010 •p. 040//
.3	Details of unitary organization	n.a.
.4	Mechanisms for recommendations or instructions to the highest governance body	→ <u>Steering and control unchanged in 2010</u> • p. 040//
l.5	Relationship between compensation for members of the highest governance body, senior executives, and members of the Management Board on the one hand, and the organization's performance on the other	© 4.5 • p. S28// → <u>Corporate management and</u> <u>control</u> • p. 030// <u>Remuneration report</u> • p. 044//
6	Mechanisms for avoidance of conflicts of interest within the highest governance body	<u> </u>
7	Qualifications and expertise of members of the highest governance body with respect to sustainability topics	<u> </u>
1.8	Statements of mission, code of conduct, principles	© 4.8 • p. 0XX// → Corporate management and control • p. 030 // Strategy and action • p. 027 // Human resources 2010 • p. 100 // @ www.solarworld.de/en/vision //

Legend • p. S10//

4.9	Procedures of highest governance body for overseeing sustainability performance	<ul> <li>         \( \begin{align*}         &amp; \text{4.9} \cdot \perp \text{.830} // \text{4.8} \cdot \perp \text{.829} // \text{Global Compact (Communication on Progress)} \cdot \perp \text{.811} // \( \begin{align*}         &amp; \text{GRI Index} \cdot \perp \text{.804} // \\         \( \begin{align*}         &amp; \text{Report on expected development with its major opportunities and risks} \cdot \perp \text{.108} // \\         \end{align*}     \] </li> </ul>	•
4.10	Procedures for evaluating the highest governance body's own sustainability performance	\( \frac{\omega}{2} \) 4.10 • p. S30 //      \( \frac{\omega}{2} \) Corporate management and control • p. 030 // Remuneration report • p. 044 //	•
4.11	Precautionary principle		•
4.12	External agreements, principles or initiatives		•
4.13	Memberships	⊚ <u>4.13</u> • p. S32//	•
4.14	Stakeholder groups	⊚ <u>4.14</u> • p. S35//	•
4.15	Selection of stakeholders	⊚ <u>4.15</u> • p. S35//	•
4.16	Engagement of stakeholders		•
4.17	Key topics and concerns raised by stakeholders		•
5.	Management approach: EC, EN, LA, HR, SO, PR	© <u>5. • p. S39// → Strategy and action</u> • p. 027// <u>Corporate</u> <u>management and control</u> • p. 030// <u>Energy and climate</u> <u>protection</u> • p. 080// @ <u>www.solarworld.de/en/vision</u> //	•
Disclo	sure to GRI standard	Information/cross-reference	Status
Econo	omic		
EC1	Direct economic value generated and distributed	⊚ <u>EC1</u> • p. S46//	O 1, 3
EC2	Financial implications due to climate change	© EC2 • p. S47// ⊙ The world energy market • p. S61// Individual risks • p. 111// Opportunities • p. 127//	•
EC3	Coverage of organization's defined benefits plan	© EC3 • p. S47// ⊙ 58. Non-current and current financial provisions • p. 198// Human resources 2010 • p. 100//	<b>O</b> <sup>2</sup>
EC4	Financial assistance received from government	© <u>EC4</u> • p. S48 //	•
EC5	Entry level wage compared to local minimum wage	Additional indicator	Data

 $\textcircled{2} \, \underline{Legend} \bullet p. \, S10 /\!/$ 

EC6	Selection of locally based suppliers		•
EC7	Locally based hiring of employees	⊚ <u>EC7</u> • p. S48//	•
EC8	Infrastructure investments and services provided mainly for public benefit	⊚ <u>EC8</u> • p. S49//	•
EC9	Indirect economic impacts	Additional indicator	n.m.
Disclo	sure to GRI standard	Information/cross-reference	Status
Enviro	nmental		
EN1	Materials used	⊚ <u>EN1</u> • p. S50//	O 3
EN2	Recycling input materials	© <u>EN2</u> • p. S50// <u>EN27</u> • p. S61//	O 2, 3
EN3	Direct primary energy consumption	© <u>EN3</u> • p. S51//	•
EN4	Indirect primary energy consumption	© <u>EN4</u> • p. S52 //	O 2
EN5	Energy savings	Additional indicator	Data
EN6	Initiatives for energy efficiency and renewable energy	Additional indicator	Data
EN7	Initiatives to reduce indirect energy consumption and reductions achieved	Additional indicator	Data
EN8	Total water withdrawal		<b>O</b> 1
EN9	Impact of water consumption	Additional indicator	n.m.
EN10	Water recycled and reused	Additional indicator	n.m.
EN11	Land in or adjacent to protected areas or areas of high biodiversity value	⊚ <u>EN11</u> • p. S54//	•
EN12	Impact on biodiversity	⊚ <u>EN12</u> • p. S54//	•
EN13	Habitats protected or restored	Additional indicator	n.m.
EN14	Strategies for protection of biodiversity	Additional indicator	n.m.
EN15	Threatened species	Additional indicator	n.m.

Legend • p. S10//

EN16	Greenhouse gas emissions	⊚ <u>EN16</u> • p. S54 //	•
EN17	Other relevant indirect greenhouse gas emissions		<b>O</b> <sup>2</sup>
EN18	Initiatives to reduce greenhouse gas emissions	Additional indicator	Data
EN19	Emissions of ozone-depleting substances	⊚ <u>EN19</u> • p. S57//	•
EN20	NO <sub>x</sub> , SO <sub>x</sub> and other air emissions	⊚ <u>EN20</u> • p. S57//	•
EN21	Total water discharge	⊚ <u>EN21</u> • p. S58//	O 1, 2
EN22	Waste by type and disposal method	⊚ <u>EN22</u> • p. S59//	O 1, 2
EN23	Significant spills	⊚ <u>EN23</u> • p. S60#	•
EN24	Hazardous waste under Basel Convention	Additional indicator	n.a.
EN25	Impact of water discharges on biodiversity	Additional indicator	n.a.
EN26	Initiatives to mitigate environmental impacts	© <u>EN26</u> • p. S60//	•
EN27	Packaging materials	⊚ <u>EN27</u> • p. S61//	<b>O</b> <sup>2</sup>
EN28	Sanctions for non-compliance with environmental laws and regulations	⊚ <u>EN28</u> • p. S61//	•
EN29	Environmental impacts of transporting products	Additional indicator	Data
EN30	Environmental protection expenditure	Additional indicator	Data
	sure to GRI standard	Information/cross-reference	Status
Social			
LA1	Total workforce by employment type, employment contract and region		O <sup>3</sup>
LA2	Employee turnover		<b>O</b> 2, 3
LA3	Benefits to full-time employees	Additional indicator	Data
LA4	Employees covered by collective bargaining agreements	⊚ <u>LA4</u> • p. S65//	•
LA5	Minimum notice periods regarding significant operational charges	♠ <u>LA5</u> • p. S66//	<b>O</b> 1

p.S10//

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LA6	Employees represented in health & safety committees	Additional indicator	n.m.
LA7	Injuries, occupational diseases, lost days, absenteeism and work-related fatalities	<u> </u>	O 2, 3
LA8	Education and training on serious diseases		•
LA9	Health & safety topics covered in agreements with trade unions	Additional indicator	n.m.
LA10	Initial and further training for employees		<b>O</b> <sup>2</sup>
LA11	Programs for skills management and life-long learning	Additional indicator	n.m.
LA12	Performance and career development reviews for employees	Additional indicator	Data
LA13	Composition of governance bodies	© <u>LA13</u> • p. S71// <u>4.8</u> • p. S29// <u>→ Human resources</u> 2010 • p. 100// @ <u>www.solarworld.de/sustainability</u> //	O 2, 3
LA14	Ratio of basic salary of men to women	⊚ <u>LA14</u> • p. S74//	O 2, 3
HR1	Investment agreements	⊚ <u>HR1</u> • p. S75 //	•
HR2	Screening of suppliers and contractors on human rights		•
HR3	Training on aspects of human rights	Additional indicator	n.a.
HR4	Incidents of discrimination	⊚ <u>HR4</u> • p. S76 //	•
HR5	Freedom of association and collective bargaining	<u> ⊕ HR5</u> • p. S76 //	<b>O</b> <sup>2</sup>
HR6	Child labor		<b>O</b> <sup>2</sup>
HR7	Forced and compulsory labor	⊚ <u>HR7</u> • p. S77//	<b>O</b> <sup>2</sup>
HR8	Training of security personnel	Additional indicator	n.a.
HR9	Violations of rights of indigenous people	Additional indicator	n.a.
S01	Impact on communities	⊚ <u>SO1</u> • p. S77// <u>4.16</u> • p. S37// <u>4.17</u> • p. S38//	<b>O</b> <sup>2</sup>
SO2	Risks related to corruption	© <u>SO2</u> • p. S77// <u>4.8</u> • p. S29// <u>→ Individual risks</u> • p. 111//	•
S03	Training in anti-corruption policies	⊚ <u>SO3</u> • p. S78// <u>4.8</u> • p. S29//	•
S04	Corruption incidents and action taken	⊚ <u>SO4</u> • p. S78//	•
S05	Lobbying	⊚ <u>SO5</u> • p. S78//	•

<u>Legend</u> • p. S10 //

S06	Contributions to political parties, politicians and related institutions	Additional indicator	n.m.
S07	Legal actions for anti-competitive behavior	Additional indicator	n.a.
S08	Sanctions for non-compliance with laws and regulations	⊚ <u>SO8</u> • p. S78//	•
PR1	Impacts on customer health and safety	⊚ <u>PR1</u> • p. S79//	•
PR2	Non-compliance with health and safety regulations	Additional indicator	n.a.
PR3	Product information	⊚ <u>PR3</u> • p. S79//	•
PR4	Non-compliance with codes concerning product labeling	Additional indicator	n.a.
PR5	Customer satisfaction	Additional indicator 🕲 <u>ESG: V06-01</u> • p. S17//	O 3
PR6	Standards related to advertising	⊚ <u>PR6</u> • p. S80// @ <u>www.solarworld.de/sustainability</u> //	•
PR7	Non-compliance with marketing standards	Additional indicator	n.a.
PR8	Breaches of customer data privacy	Additional indicator	n.a.
PR9	Sanctions for non-compliance with product and service regulations	⊚ <u>PR9</u> • p. S80//	•
+	Confirmation	(5) Confirmation • p. S81//	•
+	Sector Supplements	No appropriate sector supplements exist	n.a.

### Legend:

- Reported in full
- O Reported in part
- Data Data not available
- n.m. Not material
- n.a. Not applicable
- n.s. Not specified
- Data marked with an "e" in the reporting are estimated values.
- Explanation type 1: The performance indicator is not material or not applicable. An explanation is provided on why the performance indicator is immaterial with regard to tests and concepts of the materiality principle. An explanation is given on why immateriality exists with regard to business processes and why corporate activities in this specific area do not have any effect.
- 2 Explanation type 2: Information on the performance indicators is not available. The barriers to data capture and improvement plans are explained. The time horizon for implementation of the improvements is specified (short-term (1–2 years), mid-term (5 years) and long-term (10 years)).
- 3 Explanation type 3: Information on the performance indicators is not allowed (protected data). It is outlined to what extent data must not be reported, i.e. whether data capture/disclosure is legally prohibited or whether the performance indicator represents confidential business information.

### GLOBAL COMPACT (COMMUNICATION ON PROGRESS)

This Communication on Progress includes the statement of Commitment to the Global Compact: 
① Letter by the Chairman • p. 009 //, the description of practical steps to implement the 10 Principles of the Global Compact in fiscal year 2010 as well as the measurement of outcomes based on application of the GRI's Key Indicators.



### 3 OVERVIEW ON THE COMMUNICATION ON PROGRESS (GLOBAL COMPACT)

Issues	Principles of the Global Compact
Human Rights	Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights.  Principle 2: Businesses should make sure that they are not complicit in human rights abuses.
Labor	Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to free collective bargaining.  Principle 4: Businesses should uphold the elimination of all forms of forced and compulsory labor.  Principle 5: Businesses should uphold the effective abolition of child labor.  Principle 6: Businesses should uphold the elimination of discrimination in respect of employment and occupation.
Environment	Principle 7: Businesses should support a precautionary approach to environmental challenges. Principle 8: Businesses should undertake initiatives to promote greater environmental responsibility. Principle 9: Businesses should encourage the development and diffusion of environmentally friendly technologies.
Anti-Corruption	Principle 10: Businesses should work against corruption in all its forms, including extortion and bribery.

Principles	Voluntary undertakings: Quotes	
Principles 1, 2, 6	Guideline 1: "We stand for human treatment and equal opportunities."	
Principle 7	<b>Guideline 2:</b> "Our production is compatible with the protection of the environment using the best possible processes and product standards."	
Principle 7	Guideline 3: "We use existing resources responsibly and sparingly."	
Principles 1 and 2	Guideline 4: "State-of-the-art methods are used to avoid any health hazards and risks that may be caused by SOLARWORLD processes and products."	
Principle 10	<b>Guideline 5:</b> "Fair competition is the very basis of our business activities. Bribery and corruption are unlawful and not tolerated."	
Principles 1–10, especially Principles 4 and 5	<b>Guideline 10:</b> "We support the Global Compact of the United Nations – especially the ban on child labor and on forced labor – and also demand compliance with it from our suppliers and business partners."	
Principles 1 and 2	Code of conduct*: "We respect the rights and dignity of all employees."	
Principle 3	Code of conduct*: "SOLARWORLD upholds the freedom of association and respects the right to free collective bargaining. Each site complies with the provisions of law, collective bargaining agreements and company rules applicable in its context. The management of each site guarantees compliance with these rules and determines local company policy in this regard."	
Principles 4 and 5	Code of conduct*: "Forced and child labor are strictly forbidden by law in most countries and worldwide at SOLARWORLD."	
Principle 6	Code of conduct*: "Nobody in the SOLARWORLD Group shall be subjected to discrimination. This also applies to the choice of contractual and business partners ()"	
Principles 7–9	Code of conduct*: "The SOLARWORLD Group devotes particular attention to protecting the environment. It is our declared aim to promote the protection of climate and resources in active ways. We therefore pledge to respect all applicable rules to the full. Moreover, we shall take pains to keep any negative environmental effects which might derive from our activities to a minimum and to reduce such effects continually ()"	
Principle 10	Code of conduct*: "The SOLARWORLD Group accepts the ICC Rules of Conduct on Extortion and Bribery in International Business Transactions of 1999 and the OECD Convention of 1997. ()"	

<sup>\*</sup> Approval by the works council in 2010 upon prior checking.

Principles	Systems	Notes/Cross References	
Principles 1–10	Values and guidelines	@ www.solarworld.de/values-and- guidelines //	
Principles 1–10	Code for suppliers (implementation had to be postponed from 2010 to 2011)	⊚ <u>4.8</u> • p. S29 // <u>5.</u> • p. S39 //	
Principles 1 and 2	Health & safety management	⊚ <u>5.</u> • p. S39// <u>LA7</u> • p. S66//	
Principles 1 and 2	No use made of private security forces by the solarworld Group	⊚ <u>5.</u> • p. S39 //	
Principle 3	Guidelines and procedures do not favor individual associations or trade unions	⊚ <u>5.</u> • p. S39 // <u>HR5</u> • p. S76 //	
Principle 3	Conditions permitting employees to exercise functions in associations or trade unions	⊚ <u>5.</u> • p. S39// <u>HR5</u> • p. S76//	
Principle 4	Pay is always more than the local minimum wage	Groupwide standard (in the U.S., no formal fringe benefits)	
Principle 4	Maximum regular working week is 40 hours, with incremental pay for overtime	Groupwide standard	
Principle 5	Minimum working age is respected, including when selecting suppliers	Minimum age 15 years (cf. ILO Convention 138(7)) or higher local minimum age // groupwide standard	
Principle 6	Standards enshrined in the German Equality Act (AGG) are applied	Groupwide standard (on a voluntary basis)	
Principles 7–9	Environmental management	<u> </u>	
Principles 1–7, 10	High legal standards in Germany and the United States		
Principle 10	Compliance Officer	SOLARWORLD has a Compliance Officer.	
Principles	Measures in 2010	Notes/Cross References	
Principles 1–10	Code of conduct adopted by works council, Management Board and Supervisory Board. Groupwide introduction and communication to all employees planned for the year 2011	<u> 4.8</u> • p. S29 // <u>5.</u> • p. S39 //	
Principles 1–10	Helpline/ombudsman: planned	© <u>www.solarworld.de/stakeholders</u> //	
Principles 1–10	Sustainable group governance		
Principle 3	Agreements with trade unions	© <u>5.</u> • p. S39// <u>HR5</u> • p. S76//	
Principles 7–9	Participation in sector-wide collaboration on Life Cycle Analysis	⊚ <u>4.16</u> • p. S37//	

Principle 7	Precautionary principle	⊚ <u>4.11</u> • p. S31//
Principle 8	PR activities to raise awareness	"Climate marketing" (e.g. EU- and U.Swide Larry Hagman campaign), promotion of research, contribution to regional development (Solar2World)
Principle 9	Continuous, because our business is exclusively solar energy	→ Annual Group Report 2010 • p. 019//
Principle 9	Technical innovations in research and development (purely solar group)	→ <u>Innovation report 2010</u> • p. 082//
Principle 9	Solar2World projects	<u>Solar2World supports Haiti</u> • p. 076//
Principles	Performance (see GRI Performance Indicators)	Notes/Cross References
Principle 1	LA4, LA7-8, LA13-14, HR1-2, HR4-7, S05, PR1	© <u>LA4</u> • p. S65// <u>LA7-8</u> • p. S66// <u>LA13-14</u> • p. S71// <u>HR1-2</u> • p. S75// <u>HR4-7</u> • p. S76// <u>S05</u> • p. S78// <u>PR1</u> • p. S79//
Principle 2	HR1-2, HR4-7, S05	<u> </u>
Principle 3	LA4-5, HR1-2, HR5, S05	<u> </u>
Principle 4	HR1-2, HR7, S05	<u> </u>
Principle 5	HR1–2, HR6, SO5	© <u>HR1−2</u> • p. S75// <u>HR6</u> • p. S76// <u>S05</u> • p. S78//
Principle 6	EC7, LA2, LA13–14, HR1–2, HR4, S05	© <u>EC7</u> • p. S48// <u>LA2</u> • p. S64// <u>LA13−14</u> • p. S71// <u>HR1−2</u> • p. S75// <u>HR4</u> • p. N76// <u>SO5</u> • p. N78//
Principle 7	EC2, EN26, SO5	© <u>EC2</u> • p. S47// <u>EN26</u> • p. S60// <u>S05</u> • p. S78//
Principle 8	EN1–4, EN8, EN11–12, EN16–17, EN19–23, EN26–28, S05, PR3	© <u>EN1-4</u> • p. S50// <u>EN8</u> • p. S53// <u>E</u> <u>N11-12</u> • p. S54// <u>EN16-17</u> • p. S54// <u>EN19-23</u> • p. S57// <u>EN26-28</u> • p. S60// <u>S05</u> • p. S78// <u>PR3</u> • p. S79//
Principle 9	EN2, EN26–27, SO5	© <u>EN2</u> • p. S50// <u>EN26−27</u> • p. S60// <u>S05</u> • p. S78//
Principle 10	S02-5	© <u>SO2−5</u> • p. S77//

### KPIS FOR ESG (KEY PERFORMANCE INDICATORS OF EFFAS/DVFA)

The European Federation of Financial Analysts Societies (EFFAS) Commission on ESG and the German Society of Investment Professionals (DVFA) Commission on Non-Financials (CNF) published a joint draft on "KPIs for ESG 3.0" in 2010. This draft contains Key Performance Indicators on the integration of extra- and non-financial performance indicators pertaining to ESG (Environmental, Social, Governance), sustainability, corporate governance and risk management for integration into classical company rating and investment decisions. We have been following this development process for years and have reported on the basis of these criteria since 2008. Although we do not have data available for all indicators yet, we report about progress achieved on a yearly basis.

### **104 PERFORMANCE INDICATORS AND NARRATIVES**

for Environment, Society and Governnance (ESG) of EFFAS/DVFA

Indicator	Name	Description	2011	2010	2009	2008	2007	Comment
ESG: E01-01 (Scope I)	Energy efficiency	Total energy consumption: primary and secondary sources (in MWh)	<u></u>	467,429 e	368,166 e	270,325 e	192,426 e	As in previous year we expect growth (under-proportionate to production increase) in 2011. (Originally we had reported 269,600 MWh.) © EN3 • p. S51 // EN4 • p. S52 //
ESG: E02-01 (Scope I)	GHG emissions	Total GHG emissions (in tCO <sub>2eq</sub> )	1	179,137 e	139,285 e	96,310 e	76,729 e	Estimate. Strong production increase in the year 2010. © <u>EN16</u> • p. S54//
ESG: S01-01 (Scope I)	Employee turnover	Share of employ- ees leaving the company per year	<b>\</b>	8.2%	9.3%	3.6 %	n.s.	So far no distinction is made between full-time and part time work. (In the 2008 report absolute figures were quoted.)  (i) LA2 • p. S64//
ESG: S02-02 (Scope I)	Training and professional development/ upskilling & qualification	Average training expenditure/ employee (in €)	<b>↑</b>	312.21	356.89	382.13	n.s.	Expenditures for training by external providers have so far not been included. A split between temporary staff and employees is not possible for U.S. data. (2) LA10 • p. S70//

ESG: S03-01 (Scope I)	Age structure of the work- force	in 10-year steps	$\leftrightarrow$	<30: 28 % 30-40: 29 % 40-50: 28 % >50: 16 %	<30: 21 % 30-40:30 % 40-50:30 % >50: 19 %	n.s.	n.s.	Share of work- force retiring within 5 years after the reporting period: This is an estimate.  LA13 • p. S71//
ESG: S08-01 (Scope I)	Pay	Total amount of all bonus pay- ments (in m€)	1	17.4	9.8	n.s.	n.s.	We do not grant stock options, but we pay a profit-oriented participation model (GOMAB). Futher data on this indicator are so far not available.
ESG: S08-02 (Scope I)	Pay	Number of FTE who receive 90 % of the bonus pay- ments	n.s.	n.s.	n.s.	n.s.	n.s.	On this topic, we do not have any data yet.
ESG: S08-03 (Scope I)	Pay	Consideration of the ESG perfor- mance in the tar- get agreements	n.s.	n.s.	n.s.	n.s.	n.s.	The ESG performance is not explicitly considered in the target agreements but is included via the basis attitude towards sustainable corporate governance.
ESG: V01-01 (Scope I)	Litigation risks	Expenditures and fines for law- suits and court cases regarding anti-competitive behavior, Anti- Trust, monopoly behavior	↔	0	0	n.s.	n.s.	
ESG: V02-01 (Scope I)	Corruption	Share of business activity in regions with a corrup- tion index of less than 6.0	1	31 %	29 %	16 %	15 %	Since 2009 expenditures only for wafers and Trade, previously only for Trade Solution Solution Solution Solution Solution Since Solution Since S
ESG: V03-02 (Scope I)	Earnings from new products	Earnings share from products with life cycles of less than 12 months	$\leftrightarrow$	30 %	35 %	n.s.	n.s.	These data refer only to SOLARWORLD AG. They are not yet available for the entire group.
ESG: V04-01 (Scope I)	Innovation	Total R&D expenditures (in m€)	$\leftrightarrow$	19.2	12.0	13.0	10.8	<u> </u>
ESG: V04-12 (Scope I)	Innovation	Total investment in research on ESG relevant aspects	100%	100 %	100%	100 %	100 %	Our entire business (solar energy) is ESG relevant.

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ESG: E23-02 (Scope II)	Production loss	Monetary effects of production loss due to material bottlenecks (in €)	0	0	0	n.s.	n.s.	
ESG: E28-01 (Scope II)	Water consumption	Total water take-out (in m³)	1	1,429,148 e	1,115,009 e	845,961	1,006,428	<u> </u>
ESG: E33-01 (Scope II)	Environmental compatibility	Share of ISO 14001 certified locations (weighted by aver- age capacity)	1	100 %	64%	74%	14 %	Indicator dropped in year 2009 due to U.S. sites not yet having been certified, at the same time increased production there.
ESG: G01-01 (Scope II)	Donations to political parties	Donations to political parties (in k€)	0	0	40	45	n.s.	Since 2010, we have not made any political donations any more.
ESG: S11-01 (Scope II)	Relocation of work places due to restructuring	Total costs of relocation (in k€) including compensation payments, severance pay, outplacement, recruitments, training, consulting	↔	507	427	n.s.	n.s.	These data are not yet collected in this aggregate form, but there are figures from the U.S. (incl. severance pay, outplacement, extended health insurance). The rise from 2009 to 2010 is due to recruitments in the course of the rampup of the 500 MW cell production as well as the 300 MW module production in Hillsboro.
ESG: V06-01 (Scope II)	Customer satisfaction with SOLARWORLD	Share of satisfied customers among all respondents	$\leftrightarrow$	85.8 %	85.4%	n.s.	n.s.	Aggregate figure (Trade) // The customer satisfaction analysis (wafer) had been planned for summer 2010 but will be conducted in 2011 only. ③ Target achievement 2009 and 2010 and targets for 2011+ p. 022//
ESG: V10-03 (Scope II)	Effects of subsidies	Share of business activity in markets with feed-in tariff or regulated pricing	<b>\</b>	100 %	100%	100 %	100 %	The shipment share in markets without feed-in tariff or regulated pric- ing is still below 1 %.

ESG: V13-01 (Scope II)	Utilization	Capacity utilization in relation to the nominal capacity (in %)	n.s.	n.s.	n.s.	n.s.	n.s.	The information is not disclosed. But we do disclose our capacities.  Groupwide, nominal year-end capacities – expansion 2010  In MWp • p. 068//  After the completion of the ramp-up phase, we produced under full capacity utilization in 2010.
ESG: V28-01 (Scope II)	Supple chain	Total number of suppliers	n.s.	n.s.	n.s.	n.s.	n.s.	The information is not disclosed.
ESG: V28-02 (Scope II)	Supply chain	Share of the 3 largest external suppliers	n.s.	n.s.	n.s.	n.s.	n.s.	The information is not disclosed.
ESG: V28-03 (Scope II)	Supply chain	Sales share of suppleirs (in %)	n.s.	n.s.	n.s.	n.s.	n.s.	The information is not disclosed.
ESG: E17-36 (Scope III)	Supply bottlenecks	Total procurement volume Indium	0	0	0	0	0	
ESG: E17-35 (Scope III)	Supply bottlenecks	Sales share of products containing Indium	0	0	0	0	0	
ESG: E22-01 (Scope III)	Commodity reserves	Covered demand (in days) of A (B, C, D) materials	n.s.	n.s.	n.s.	n.s.	n.s.	The information is not disclosed.
ESG: E23-01 (Scope III)	Production loss	Production loss, i.e. difference between planned and actual produc- tion, due to mate- rial bottlenecks (in %)	0	0	0	n.s.	n.s.	
ESG: E28-02 (Scope III)	Water consumption	Water (in m³) per production quantity (in MW)	n.s.	n.s.	n.s.	n.s.	n.s.	This indicator has no validity groupwide as we produce along the entiry value chain and the products are not comparable in terms of their water consumption which in turn prevents year-on-year comparisons.
ESG: E28-03 (Scope III)	Water consumption	Ground water consumption (in m³)	n.s.	n.s.	n.s.	n.s.	n.s.	On this topic, we do not have any data yet.
ESG: E28-04 (Scope III)	Water consumption	Waste water injections (in m³)	1	1,345,832 e	902,912 e	820,449 e	793,224 e	<u> </u>

ESG: V05-01 (Scope III)	Customer loyalty	Share of new customers (spe- cialist partners)	$\leftrightarrow$	7%	20%	n.s.	n.s.	End 2010: 506 specialist partners
ESG: V05-03 (Scope III)	Customer loyalty	Market share (total)	$\leftrightarrow$	5 %	5 %	n.s.	n.s.	
ESG: V28-04 (Scope III)	Supply chain	Maintenance of ESG standards by suppliers	n.s.	n.s.	n.s.	n.s.	n.s.	There are no data on this yet as we had to postpone the launch of the suppliers' code to the year 2011.
ESG: V28-05 (Scope III)	Supply chain	Incentives for procurement to select suppliers who are well prepared in terms of ESG even though they may charge higher prices	n.s.	n.s.	n.s.	n.s.	n.s.	There are no data on this yet as we had to postpone the launch of the suppliers' code to the year 2011.

### S20 STRATEGY AND MANAGEMENT

### / 1.2 / KEY IMPACTS, RISKS AND OPPORTUNITIES

#### PART 1: PRINCIPAL SOLARWORLD IMPACTS ON SUSTAINABILITY AND CONSEQUENCES FOR STAKEHOLDERS

- Achievements  $\bigcirc$  Target achievement 2009 and 2010 and targets for 2011+ p. 022//
- Description of the most important programs ① <u>Corporate management and control</u> p. 030// <u>Human Resources 2010</u> • p. 100// @ <u>annualgroupreport2010.solarworld.de/further-details</u> //

# PART 2: IMPACT OF SUSTAINABILITY TRENDS, RISKS AND OPPORTUNITIES ON THE LONG-TERM DEVELOPMENT AND FINANCIAL PERFORMANCE OF SOLARWORLD AG

Long-term effects of sustainability trends, risks and opportunities on Solarworld  $\bigcirc$  *Report on expected development with its major opportunities and risks* • p. 108//

### /2.10 / AWARDS

### BEST ANNUAL REPORTS (MANAGER MAGAZIN), 1<sup>ST</sup> PLACE (TECDAX) (2009: 2<sup>ND</sup> PLACE (TECDAX))

In the renowned competition for "the best annual reports" by manager magazin, we came 1<sup>st</sup> in the TecDAX category and 8<sup>th</sup> in the overall ranking of 160 participating companies. The jury, chaired by Prof. Jörg Baetge from Münster University as its scientific expert, checked the annual reports of the largest German corporations listed on the DAX, MDAX, SDAX and TecDAX in the categories contents, style and language. The 4 best reports of each index are additionally examined by an expert jury with a view to conciseness, credibility and reporting efficiency.

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### DELOITTE TECHNOLOGY FAST 50 AWARD (DELOITTE), 47<sup>TH</sup> PLACE (2009: 34<sup>TH</sup> PLACE)

In 2010 SOLARWORLD AG was once again among the fastest growing technology companies in Germany. On Oct. 20, following 184.7 percent growth over 5 years, the group received the Technology Fast 50 award in Hamburg from business consultants Deloitte, marking us as 1 of 50 enterprises in the fields of technology, communication and life science. In granting this prize in 2010, the jury honored the cumulative growth in sales over the last 5 fiscal years and a unique tale of growth and success. The award was presented in cooperation with the magazine Capital, Deutsche Börse AG and the German Society of Investment Professionals (DVFA).

### DELOITTE TECHNOLOGY FAST 50 SUSTAINED EXCELLENCE AWARD (DELOITTE), TOP 3

Together with 2 other companies, Solarworld was presented with the Sustained Excellence Award in 2010. This category was created to award companies for their excellence in long-term growth, driven chiefly by innovativeness, entrepreneurial spirit and financial performance. Candidates are evaluated by specific Technology Fast 50 criteria and on the grounds of other standards pertaining to management and corporate culture, competitive edge and/or position and financial performance indicators. The evaluation criterion as such is average growth rates (in percent) over the past 5 business years. Sales must be generated to a significant extent by proprietary technologies to make a company eligible for this award. The award is presented by the Deloitte consultancy firm.

### 2010 SOLAR PV COMPANY SCORECARD (SILICON VALLEY TOXICS COALITION), 2ND PLACE

In a survey, the non-profit company Silicon Valley Toxics Coalition (SVTC) evaluated more than 200 solar power module manufacturers by various criteria including environment, health and safety, sustainability, workers' rights and social fairness. Due to its sustainability focus, SOLARWORLD achieved 2<sup>nd</sup> position in their ranking table, which was led by 3 companies from Germany – Calyxo GmbH (90 points), SOLARWORLD AG (88 points) and Sovello AG (73 points). Furthermore, the SVTC researchers found that only approx. 30 module manufacturers are producing commercially, whereas all others have only reached the research and development or pilot production stage.

### LEAGUE OF AMERICAN COMMUNICATIONS PROFESSIONALS (LACP) AWARD, GOLD

SOLARWORLD won against over 4,000 candidates from all over the world in the category of online annual reports (the report was only evaluated in this category). The competition is organized by the LACP, an American association for communication with an international focus.

### S22 ANNUAL REPORT COMPETITION (ARC) AWARD, BRONZE

In 2010, the SOLARWORLD online report was presented with the ARC Award in bronze. The ARC Award for annual reports of public and private companies has been presented annually by MerComm Inc./ The International Academy of Arts & Sciences, Ossining, N.Y., since 1987. ARC is the largest annual report competition worldwide.

### CRRA, BEST INTEGRATED REPORT, 4<sup>TH</sup> PLACE (2009: 4<sup>TH</sup> PLACE)

Like the Solarworld Group Report 2007 in the previous year, the Solarworld Group Report came 4<sup>th</sup> in the category of annual reports with integrated sustainability reporting. Positions 1 to 3 were achieved by Novo Nordisk A/S, BASF SE and VeoliaEnvironnement. (The Solarworld Group Report 2009 was not yet evaluated in the ongoing CRRA competition at the time of reporting.)

### "GUTE GESTALTUNG" ("GOOD DESIGN") (DEUTSCHER DESIGNER CLUB), BRONZE

Deutscher Designer Club is a platform for interdisciplinary designers. The "Gute Gestaltung" competition was organized for the 11<sup>th</sup> time. In 2010, the club presented awards to 164 projects in total. Bronze was awarded to Solarworld conjointly with 9 other companies in the "Corporate Communications" category.

### CAPITAL IR AWARD, 23RD PLACE (TECDAX) (2009: 25TH PLACE (TECDAX))

DVFA evaluates the IR work of the most important German and European companies listed on the indexes Euro-STOXX 50, DAX, MDAX, TecDAX and SDAX. Evaluation criteria included target-group orientation, transparency, track record and extra-financial reporting. This award has been presented by Capital magazine since 1997. In 2010, SOLARWORLD AG came 23<sup>rd</sup> in the TecDAX for its IR work.

### TRENDENCE INSTITUT, 14<sup>TH</sup> PLACE (2009: 15<sup>TH</sup> PLACE)

2010, once more was SOLARWORLD AG among the most popular potential employers of budding German engineers. In the "trendence Graduate Barometer 2010" study by the Berlin-based trendence Institut, published by manager magazin, we managed to improve from a good 15<sup>th</sup> position in the "engineering edition" and turned out 14<sup>th</sup>. Just under 30,000 students pending graduation were surveyed at German universities for 4 editions of the study.

### BIRD – BEST INVESTOR RELATIONS DEUTSCHLAND (BÖRSE ONLINE), 5<sup>TH</sup> PLACE (2009: 8<sup>TH</sup>)

In a survey by the business journal "Börse online", readers elected the investor relations department of Solarworld ag 5<sup>th</sup> among TecDAX-listed companies in early 2010. The competition focused on credibility and understandability of corporate communications.

### GERMAN IR AWARD (WIRTSCHAFTSWOCHE), 13TH PLACE (TECDAX) (2009: 14TH PLACE (TECDAX))

For the 5<sup>th</sup> time now, Thomson Reuters Extel Surveys conducted a comprehensive study on "excellence in investor relations in Germany" in cooperation with the German Investor Relations Association (DIRK). Worldwide, some 815 experts from over 300 buy-side and sell-side companies evaluated 174 public corporations and just under 400 IR officers. Solarworld AG was awarded the 13<sup>th</sup> place by the business magazine WirtschaftsWoche.

# UNIVERSUM STUDENT SURVEY 2010 (WIRTSCHAFTSWOCHE), 10<sup>TH</sup> PLACE (NATURAL SCIENCE) & 13<sup>TH</sup> PLACE (ENGINEERING)

For the 6<sup>th</sup> time, the personnel consultancy firm Universum asked more than 20,000 students of business and economics, engineering, natural science and IT at over 100 German universities to name the company they would most like to work with. In the study published by the business magazine WirtschaftsWoche, employment by SOLARWORLD is perceived as a very attractive option. As far as the most popular employers among graduates are concerned, SOLARWORLD ranks 13<sup>th</sup> best among engineers and, better still, 10<sup>th</sup> among natural scientists.

### GERMANY'S 1,000 WORLD MARKET LEADERS (MANAGER MAGAZIN), 151ST PLACE

Commissioned by manager magazin, the consultant Bernd Venohr compiled a list of 1,000 German world market leaders strongest in sales. He included all companies that belong to the top 3 dominating forces worldwide in their market segment. Solarworld AG managed to position itself ahead of all listed photovoltaics companies, which made it 151st before SMA Solar.

#### CETPM AWARD, BRONZE

SOLARWORLD'S wafer manufacturing plant in Freiberg, Germany, was the first company in the photo-voltaics industry to receive the CETPM Award. The German Centre of Excellence for Total Productive Management (CETPM) is an independent, neutral competence center, which evaluates to what extent operational improvements were achieved in companies. By improving its operational processes, the group paved the way for increased global competitiveness.

### \$24 PHOTON TEST 2010, 1<sup>ST</sup> PLACE (YEAR 2006) (2008: 1<sup>ST</sup> PLACE)

Again, SOLARWORLD AG turned out to win the test of a quality study by the PHOTON journal. This referred to modules produced in 2006 had been tested.

### BRANDINDEX TOP PERFORMER 2010 (YOUGOV), 1ST PLACE (ENERGY)

In 2010, the YouGov market research institute published a ranking table of Germany's strongest brands on the basis of a survey among approx. 250,000 consumers. SOLARWORLD was voted 1<sup>st</sup> among the most popular brands in the energy sector. In the overall ranking, SOLARWORLD positioned itself before the telecommunications brand Vodafone and the filling station brand Jet. Within a range from plus 100 to minus 100 points, SOLARWORLD achieved plus 50.

#### ÖKO-TEST, 2010: "EXCELLENT"

The consumer magazine ÖKO-TEST (issue 5/2010) evaluated SOLARWORLD's polycrystalline photovoltaics modules Sunmodule® Plus SW 225 poly as "excellent". In cooperation with the Photon test laboratory, the magazine analyzed the performance of 17 mono- and polycrystalline solar modules produced in Germany and abroad.

### OEKOM RESEARCH, 2010: PRIME A (2008: PRIME A-)

In 2010, SOLARWORLD was once more evaluated by oekom research and improved its rating to A. In other words, oekom classifies SOLARWORLD as PRIME, which qualifies SOLARWORLD shares as an ecological, socially compatible investment.



#### SRI AUDIT BY VIGEO GROUP, SINCE 2008

Specialized in SRI audits, the Vigeo Group regularly evaluates the performance of SOLARWORLD in the field of sustainable development and social responsibility. They last updated their audit in April 2010. For further information, please contact Vigeo.

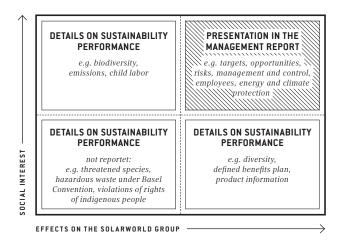


### /3.5 / PROCESS FOR DEFINING REPORT CONTENT

MATERIALITY: Materiality is determined by the economic, environmental and social/societal impact of the various topics and indicators. Disclosure is practiced for the purpose of informing stakeholders. It includes the topics and indicators which significantly influence the assessments and attitudes of stakeholders. We assume in principle that all Core Indicators contain significant information for the stakeholders in all organizations. However, not all indicators apply to all companies to the same extent. Regarding Additional Indicators, the data available were not sufficient in some cases. The other indicators were not considered relevant or are not applicable. @ GRI Index • p. S04//

The following chart shows that the Annual Report covers topics of equally high priority for society and the company. Disclosures on the remaining issues are provided in the present details on sustainability performance.

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PRIORITIES: We have included as many Core Indicators as our current data situation will allow. In some cases we have internal data available which we are not able to disclose because they include confidential information. We are making every effort to further increase the transparency of our GRI reporting. On the joint ventures we do not yet have sufficiently detailed statistical data available. We intend to pursue this more vigorously in the mid-term along with our joint venture partners.

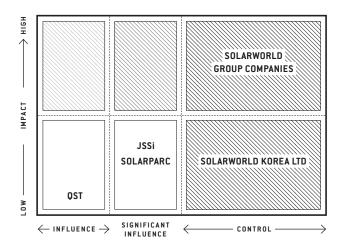
STAKEHOLDERS: The main stakeholder groups who will use the present report are investors (shareholders, institutional investors, analysts as intermediaries). In addition, the report will serve to inform employees and customers (wholesalers, installers, end customers) and suppliers of the SOLARWORLD Group. It will also be a source of information for the interested public.

### /3.6 / REPORTING BOUNDARY

As a general rule, the reporting boundary includes all the organizational units that we control and significantly influence, i.e. all Solarworld Group companies. Upstream and downstream stages of the value chain outside the Solarworld Group are included only to a limited degree, due to lack of control and influence. Apart from the Group companies, management policy also applies to Solarworld Korea Ltd. The strategic information in this report furthermore relates to the Joint Solar Silicon (JSSI) Verwaltungs-gmbh, the joint venture Qatar Solar technologies Q.S.C. (QST) and Solarparc ag (@ <a href="https://www.solarparc.de/konzernbericht2010">www.solarparc.de/konzernbericht2010</a> //. Any reporting boundaries that depart from this principle are indicated for each individual item in the GRIs.

In terms of performance indicators subsidiaries and leased facilities are included as a matter of course. Joint ventures are only included if we exert operational control and significant strategic influence with regard to a specific indicator. Outsourced operations (such as logistics services) are not included. The reporting boundaries are as congruent as possible with those of the previous year to ensure that reporting periods and data relating to different structures remain comparable. Any departures from this principle are indicated. The results are representative of the Group or are interpreted in that sense.

### **66 REPORTING BOUNDARY**



Control means "the power to govern the financial and operating policies of an enterprise so as to obtain benefits from its activities" (GRI). A significant influence means "the power to participate in the financial and operating policy decisions of the entity but not control over those policies" (GRI).

### S28 /3.7 / LIMITATIONS ON SCOPE OF REPORTING

Limitations on scope are currently set by the reasons indicated. 3.5 – *Priorities* • *p. S26*// Further details are highlighted for specific indicators.

### /3.10 / RESTATEMENT OF INFORMATION FROM EARLIER REPORTS

For data protection reasons, the performance indicator LA14 (manager salaries in "Rest of the World") (DA14 • p. S74// has been adjusted. Apart from that, we have not adjusted the fundamental format of the previous year but have updated reported figures if more accurate values were available.

### /3.11/ CHANGES IN REPORTING SCOPE, BOUNDARY OR MEASURING METHODS

This year, we offer more data depth in our online report. @ <a href="mailto:annualgroupreport2010.solarworld.de/">annualgroupreport2010.solarworld.de/</a> further-details // In addition, we disclose more detailed data on the performance indicators EN16, EN22, EN26 and EN27. There were no significant changes compared to the previous year. However, we are offering more in-depth data in the online report this year. The explanations to the indicators outline minor adjustments.

#### /3.13 / EXTERNAL ASSURANCE

Like the Group Management Report and Financial Statements, the present report was subjected to audit inspection by BDO AG Wirtschaftsprüfungsgesellschaft. During its audit, BDO observed the German Basic Principles of Appropriate Audit Inspection for Reports in the Field of Sustainability established by the German Auditors' Institute (IDW). © <u>Confirmation</u> • p. S81// This standard (PS 821) includes and exceeds the standards contained in ISAE 3000.

# 7 4.5 7 RELATIONSHIP BETWEEN COMPENSATION FOR MEMBERS OF THE HIGHEST GOVERNANCE BODY, SENIOR EXECUTIVES, AND MEMBERS OF THE MANAGEMENT BOARD AND TOP MANAGEMENT

There is no specific compensation component for sustainability aspects. Such aspects are covered by
sustainable management. (a) Corporate management and control • p. 030// Remuneration report • p. 044.

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# 74.67 MECHANISMS FOR AVOIDANCE OF CONFLICTS OF INTEREST WITHIN THE HIGHEST GOVERNANCE BODY

Solarworld does not offer any share-based compensation elements so as to avoid conflicts of interest. In this way, we wish to ensure that our top management will not strive for short- to mid-term share-price increases but will rather act for the benefit of long-term corporate success. In the course of our code of conduct roll-out 9 4.8 • p. S29//, Solarworld will appoint confidential persons to consult whenever a compliance issue arises, which would include conflicts of interest.

# V4.7 QUALIFICATIONS AND EXPERTISE OF MEMBERS OF THE HIGHEST GOVERNANCE BODY WITH RESPECT TO SUSTAINABILITY TOPICS

The CEO, Dr.-Ing. E.h. Frank Asbeck, holds a degree in agricultural engineering and an honorary doctorate from the Faculty of Chemistry and Physics of Freiberg University of Mining and Technology. He was involved in development projects in Africa before setting up SOLARWORLD AG. He is a founding member of the Green Party.

Boris Klebensberger (Dipl.-Ing.) joined SOLARWORLD AG at about the time when he was finishing his degree studies. He has been the company's COO since 2001.

Philipp Koecke (Dipl.-Kfm. tech.) joined SOLARWORLD AG after working in the finance and banking sector for many years. He has been SOLARWORLD AG'S CFO since 2003.

Frank Henn (Dipl.-Wirtschaftsing.) has many years of experience in sales and marketing in multinational companies. He has been SOLARWORLD AG'S CSO since 2003.

### /4.8 / MISSION STATEMENT, CODE OF CONDUCT, PRINCIPLES

Our vision, our values, our guidelines, our codes (SOLARWORLD Code of Conduct and SOLARWORLD Suppliers' Code) and our strategy reflect our economic, environmental and social/societal mission statements. These mission statements apply throughout the group and are implemented by means of our management instruments and by the examples set by our senior executives. 

\*\tilde{\Omega} \text{Corporate} \text{management and control} \cdot p. 030 // \text{Strategy and action} \cdot p. 027 // \text{Human resources 2010} \cdot p. 100 // \text{\Omega} \text{www.solarworld.de/en/vision} //

Furthermore, SOLARWORLD signed up to the United Nations Global Compact in 2009 and has pledged to work for its 10 Principles, and this includes making explicit reference to them in the SOLARWORLD Code of Conduct.

The Solarworld Code of Conduct is a voluntary groupwide standard for conduct on the basis of applicable international and national law, which governs our conduct in areas where no economic or legal framework is formulated or existing rules do not suffice in Solarworld's view. The code of conduct was put to the works council's vote in Freiberg in 2010. In doing so, we complied with a ruling of the German Federal Court of Labor (BAG) dated July 22, 2008 with a view to the legal stipulations of Section 87 of the German Works Constitution Act (BetrVG). Upon the works council's approval, the Code was adopted and signed by the Supervisory Board and Management Board in 2010. We plan to roll out and communicate the Code groupwide in 2011. Additionally, we plan to include Code topics in initial and further training schemes we conduct in the group.

We will also try to commit our business and contract partners to comply with similar standards. In this context, we adopted the SOLARWORLD Suppliers' Code in 2009, which is currently being converted into process standards and is scheduled for communication to suppliers in early 2011.

# 74.97 PROCEDURES OF HIGHEST GOVERNANCE BODY FOR OVERSEEING SUSTAINABILITY PERFORMANCE

Since 2007, we have systematically mainstreamed economic, ecological and social aspects into our management instruments to consider them in a combined light. The SOLARWORLD Scorecard reflects these groupwide indicators. Additionally, all SOLARWORLD sites and the joint venture in Korea have been certified according to ISO 9001 and ISO 14001 since 2010. Opportunities and risks are covered by our risk management tools. (a) Report on expected development with its major opportunities and risks • p. 108 // The code of conduct was adopted in 2010. (a) 4.8 • p. S29 // Sustainable performance is measured annually and has been disclosed since 2007 according to the GRI reporting standards. Since 2009, we have issued Communications on Progress describing how we have been implementing Global Compact principles. (a) GRI Index • p. S04 // (b) Global Compact (Communication on Progress) • p. S11 //

### / 4.10 / PROCEDURES FOR EVALUATING THE HIGHEST GOVERNANCE BODY'S OWN PERFORMANCE

Our integrated sustainability management  $\bigcirc$  <u>Corporate management and control</u> • p. 030// covers sustainability aspects, but there is no separate performance assessment in this respect.  $\bigcirc$  <u>Remuneration</u> report • p. 044//

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### / 4.11 / PRECAUTIONARY PRINCIPLE

The precautionary principle has been institutionalized in our company by way of our risk management, quality and environmental management, sustainability management as well as the internal audit. If there is any danger of serious or irreversible damage, uncertainties in scientific assessment should not serve as a reason for postponing cost-effective anti-pollution measures until a later date. This basic orientation is also underscored by our voluntary disclosures such as GRI reporting and participation in the Carbon Disclosure Project (CDP).  $\bigcirc$  <u>Corporate management and control</u> • p. 030// <u>Report on expected development with its major opportunities and risks</u> • p. 108//

### / 4.12 / EXTERNAL AGREEMENTS, PRINCIPLES OR INITIATIVES

### @ EXTERNAL AGREEMENTS, PRINCIPLES OR INITIATIVES

Principles/agreements/initiatives	Time- frame	Locations	Established by/including	Motivation
Application of ISO standards 9001 and 14001	since 2010	groupwide	ISO	voluntary
Member of the Global Compact	since 2009	groupwide	United Nations	voluntary
Reporting in accordance with KPIs for ESG by DVFA (since 2010 also by EFFAS)	since 2008	groupwide	(EFFAS), DVFA	voluntary
Code of conduct development	since 2007	groupwide	employees	voluntary
Reporting under the GRI framework	since 2007	groupwide	GRI, based on a worldwide multi-stakeholder dialog	voluntary
Member of the PV Cycle initiative	since 2007	groupwide	cell and module manufacturers	voluntary
Participation in the NetJetsClimate Initiative ② 1.2 • p. S20// EN17 • p. S55//	since 2007	groupwide	NetJets	voluntary
Participation in the Carbon Disclosure Project (CDP)	since 2005	groupwide	institutional investors	voluntary

# S32 /4.13 / MEMBERSHIPS

### ® VOLUNTARY MEMBERSHIP OF ASSOCIATIONS/ADVOCACY ORGANIZATIONS

Organization	Since	Member	Function
SEMI (Semiconductor Equipment and Materials Institute)	1978	SOLAR WORLD INDUSTRIES AMERICA INC.*/ Jim Moreland	Member of the Silicon Wafer Committee
Camarillo Chamber of Commerce	1980	SOLARWORLD INDUSTRIES AMERICA INC.*/ Janet Gagnon	Member and Bronze Sponsor
VCEDA (Ventura County Economic Development Association)	1989	SOLARWORLD INDUSTRIES AMERICA INC.*/ Janet Gagnon	Member
FlaSEIA (Florida Solar Energy Industries Association)	1989	SOLARWORLD AMERICAS LLC */ Peter De Napoli	Board member
SEIA (Solar Energy Industries Association)	1990	SOLARWORLD INDUSTRIES AMERICA INC.*/ Raju Yenamandra, Boris Klebensberger	Board members
ASQ (American Society for Quality)	1992	SOLARWORLD INDUSTRIES AMERICA INC.*/ Steve Hunter (since1988)	Member
ANSI (American National Standards Institute)	1997	SOLARWORLD INDUSTRIES AMERICA INC.*/ Paul Norum (since 2006)	Member
IEC (International Electrotechnical Commission) Technical Committee 82	1997	SOLARWORLD INDUSTRIES AMERICA INC.*/ Paul Norum (since 2008)	U.S. TAG (Technical Advisory Group)
UL/PV section	1997	SOLARWORLD INDUSTRIES AMERICA INC.*	Advisory Council member
IEEE (International Electrical and Electronics Engineers)	1998	SOLARWORLD INDUSTRIES AMERICA INC.*/ Paul Norum (since 2006)	Member of the PV Standards Committee
SESHA (Semiconductor, Environmental, Safety and Health Association)	1998	SOLARWORLD INDUSTRIES AMERICA INC.*/ Sergio Vasquez	Member
NFPA (National Fire Prevention Association)	1998	SOLARWORLD INDUSTRIES AMERICA INC.*/ Sergio Vasquez	Member
DGS (Deutsche Gesellschaft für Sonnen- energie) e.V., Munich, Germany	1998	SOLARWORLD AG	Membership
Eurosolar, Bonn, Germany	1999	SOLARWORLD AG	Membership
access e.V.	1999	DEUTSCHE SOLAR GMBH	Member
FSEC (Florida Solar Energy Center)	2000	solarworld americas llc */ Peter De Napoli	Board member
Freiberger Interessengemeinschaft der Recyling- und Entsorgungsunternehmen (F.I.R.E.) e.V.	2002	DEUTSCHE SOLAR GMBH	Member
Dresdner Gesprächskreis der Wirtschaft und Wissenschaft e.V.	2002	DEUTSCHE SOLAR GMBH	Member
Solar Alliance	2003	SOLARWORLD AMERICAS LLC */ Janet Gagnon	Board member
Bundesverband Solarwirtschaft	2003	SOLARWORLD AG (formerly DEUTSCHE SOLAR)	Member
Silicon Saxony e.V.	2003	DEUTSCHE SOLAR GMBH	Member

VIK (Verband der industriellen Energie- und Kraftwirtschaft)	2005	DEUTSCHE SOLAR GMBH	Member
SEBANE (Solar Energy Business Association of New England)	2005/ 2010	SOLARWORLD AMERICAS LLC*/Janet Gagnon (stopped and restarted in 2010)	Member
VCREA (Ventura County Regional Energy Alliance)	2005	SOLARWORLD INDUSTRIES AMERICA INC.*/ Janet Gagnon	Advisory board member of technical committee
European Photovoltaic Industry Association (EPIA), Brussels	2006	Boris Klebensberger	Board member
"Technische Universität Bergakademie Freiberg" foundation	2006	Prof. Dr. Peter Woditsch	Member of the foundation council
Stifterverband für die deutsche Wissenschaft	2006	Prof. Dr. Peter Woditsch	Member of the regional trust for central Germany
Bundesverband Solarwirtschaft	2007	DrIng. E.h. Frank Asbeck	Board member
NYSEIA (New York Solar Industry Association)	2007	solarworld americas llc/ Janet Gagnon	Board member
OSEIA (Oregon Solar Industry Association)	2007	SOLARWORLD AMERICAS LLC	Board member
Zoologisches Forschungsmuseum Alexander Koenig, Leibniz-Institut für Biodiversität der Tiere	2007	DrIng. E.h. Frank Asbeck	Chairman of the trustees of the Alexander-Koenig- Gesellschaft
Hillsboro Chamber of Commerce	2007	SOLARWORLD INDUSTRIES AMERICA INC.	Member
UnternehmensGrün e.V.	2007	SOLARWORLD AG	Member
CanSIA (Canadian Solar Industry Association)	2007	SOLARWORLD AMERICAS LLC	Member
PV Cycle	2008	Dr. Karsten Wambach	President
Oregon University System Engineering & Technology Industry Council (ETIC)	2008	SOLARWORLD INDUSTRIES AMERICA INC.	Board member
Oregon Business Association	2008	SOLARWORLD INDUSTRIES AMERICA INC./ Ben Santarris	Member
American Solar Energy Society	2008	SOLARWORLD AMERICAS LLC	Member
CALSEIA (California Solar Energy Industry Association)	2008	SOLARWORLD AMERICAS LLC/Janet Gagnon	Member
AriSEIA (Arizona Solar Energy Industry Association)	2008	solarworld americas llc/Janet Gagnon	Member
MSEIA (Mid-Atlantic Solar Energy Industries Association)	2008	solarworld americas llc/Janet Gagnon	Member
TREIA (Texas Renewable Energy Industries Association)	2008	solarworld americas llc/Janet Gagnon	Member
HSEA (Hawaii Solar Energy Association)	2008	SOLARWORLD AMERICAS LLC/Janet Gagnon	Member
MDV-SEIA (Maryland DC Virginia Solar Energy Industry Association)	2008	solarworld americas llc/Janet Gagnon	Member
Valley Industry and Commerce Association	2008	SOLARWORLD AMERICAS LLC/Janet Gagnon	Member
Solar Oregon	2008	solarworld americas llc/Janet Gagnon	Member

2008	Gordon Brinser	Board member
2008	SOLARWORLD AG	Member
2008	Mario Behrendt (since 2009, previously Prof. Dr. Peter Woditsch)	Member
2008	SOLARWORLD INDUSTRIES AMERICA INC.	Member
2009	Mario Behrendt	Member
2009	SOLARWORLD AG	Member
2009	Jörg Müller	Member
2009	SOLARWORLD INDUSTRIES AMERICA INC./ Jim Moreland	Member PV Stan- dards Commission
2009	SOLARWORLD AMERICAS LLC/Janet Gagnon	Member
2009	SOLARWORLD INDUSTRIES AMERICA INC./ Ben Santarris	Member
2010	solarworld americas llc/Janet Gagnon	Member
2010	Mario Behrendt	Advisory member
2010	SOLARWORLD KOREA LTD.	Member
2010	DEUTSCHE CELL GMBH	Member
2010	solarworld americas llc/Janet Gagnon	Member
2010	SOLARWORLD INDUSTRIES AMERICA INC./ Janet Gagnon	Member
2010	SOLARWORLD INDUSTRIES AMERICA INC./ Ethan Good	Chairman of the Industry Advisory Board
2010	SOLARWORLD INDUSTRIES AMERICA INC./ Ben Santarris	Member
2010	DEUTSCHE SOLAR GMBH/Mario Behrendt	Member
2010	SOLARWORLD INDUSTRIES AMERICA INC./ James Moreland	Member of the scien- tific advisory board
2010	SOLARWORLD INDUSTRIES AMERICA INC./ James Moreland	Member of the scientific advisory board
2010	SOLARWORLD INDUSTRIES AMERICA INC./ Gordon Brinser	Member
2010	SOLARWORLD INDUSTRIES AMERICA INC./ Gordon Brinser	Member
2010	SOLARWORLD AMERICAS LLC	Member
	2008 2008 2008 2008 2009 2009 2009 2009	2008 SOLARWORLD AG 2008 Mario Behrendt (since 2009, previously Prof. Dr. Peter Woditsch) 2008 SOLARWORLD INDUSTRIES AMERICA INC. 2009 Mario Behrendt 2009 SOLARWORLD AG 2009 Jörg Müller 2009 SOLARWORLD INDUSTRIES AMERICA INC./ Jim Moreland 2009 SOLARWORLD INDUSTRIES AMERICA INC./ Jim Moreland 2009 SOLARWORLD INDUSTRIES AMERICA INC./ Ben Santarris 2010 SOLARWORLD AMERICAS LLC/Janet Gagnon 2010 Mario Behrendt 2010 SOLARWORLD KOREA LTD. 2010 DEUTSCHE CELL GMBH 2010 SOLARWORLD INDUSTRIES AMERICA INC./ Janet Gagnon 2010 SOLARWORLD INDUSTRIES AMERICA INC./ Janet Gagnon 2010 SOLARWORLD INDUSTRIES AMERICA INC./ Ethan Good 2010 SOLARWORLD INDUSTRIES AMERICA INC./ Ben Santarris 2010 DEUTSCHE SOLAR GMBH/Mario Behrendt 2010 SOLARWORLD INDUSTRIES AMERICA INC./ James Moreland

 $<sup>\</sup>mbox{\ensuremath{^{\star}}}$  This includes the former Shell Solar and/or Siemens Solar and/or Arco Solar.

### /4.14/ STAKEHOLDER GROUPS

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The stakeholder groups involved in the decisions taken by SOLARWORLD are primarily employees, customers (wholesalers, installers, but also end users), SOLARWORLD Group suppliers, banks/creditors and governments/agencies. Shareholders and investors are included as stakeholders in this section. Other stakeholders included here are analysts and brokers as intermediaries, NGOs, competitors, local residents, associations and trading communities, employees' representatives or organizations, the press and interested members of the public.

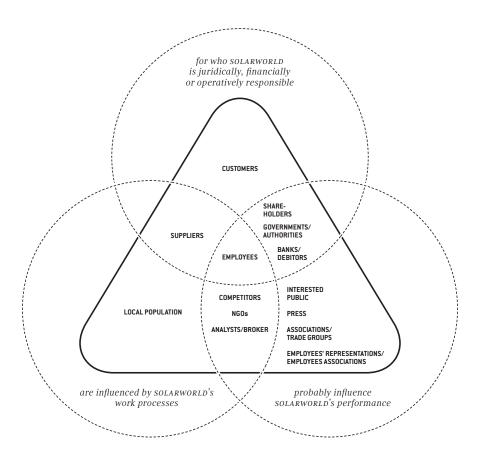
### /4.15 / SELECTION OF STAKEHOLDER GROUPS

Based on Mason and Mitroff, 1981, and the criteria of the AccountAbility Standards AA 1000 SES, we use the following questions to determine the stakeholder groups for our activities:

- Who are we responsible for (in legal/financial/operational terms)?
- · Who is directly or indirectly affected by/dependent on our activities or the impact of such activities?
- Who is in a position to influence (hamper/promote) or decide about implementation of our activities?
- Who are we in close contact with or maintain close relationships with?
- Who has voiced their opinion on issues of relevance to us?
- Which groups (formed by demographic or other characteristics) are likely to be interested in our activities and the results of these activities?

Our main stakeholders are those for whom we are directly responsible:

# **® STAKEHOLDERS**



The figure above provides an overview of our stakeholders based on the scheme underlying the AA 1000 Standard which is made available by a member organization, the not-for-profit Institute of Social and Ethical Accountability.

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## / 4.16 / ENGAGEMENT OF STAKEHOLDERS

The needs of all stakeholder groups are currently already incorporated but they are analyzed to varying degrees of depth. An internal analysis is made for all stakeholder groups, based on information available within the company and in external studies. Regular surveys are carried out among our customers → Operating metrics act as leading indicators • p. 031//, suppliers and employees. → Human resources - future development • p. 140// We conduct systematic surveys among our wafer clients, wholesalers and installers. So far, end customers can only been interviewed on an ad-hoc basis since such surveys require a lot of time and effort. In the mid-term, we hope to do this for our other stakeholder groups, too. We also maintain close links with the communities at our sites. Moreover, as a member of various associations and advocacy groups and through our collaboration with scientific bodies we are engaged in regular exchanges of socio-political views with further stakeholders. We exchange ideas on topics like Life Cycle, Recycling and Sustainability with members of PV Cycle, the EPIA (Sustainability Group), Silicon Valley Toxics Coalition (SVTC), as well as within the Solar Energy Industry Association (SEIA) and participate in the IEA Task 12 (Sustainability, Health & Safety). We also make our expertise available by way of panel discussions for example at the PV SEC in Valencia. In our Solar2World projects @ www.solarworld.de/sustainability //, we work closely with the local stakeholders (e.g. communities and NGOs) in order to offer solutions that will give the population the maximum benefit and can be continued by the local people themselves after completion of the project. As a result, the company is aware of the needs and able to take them into account in its decision-making processes.

When compiling this report, we drew on specialist feedback from ratings agencies and sustainability experts. We are submitting our Report to the voting for the 2<sup>nd</sup> CR Reporting Award for the online CorporateRegister.com @ <a href="www.corporateregister.com">www.corporateregister.com</a> // and the GRI Readers' Choice Awards 2010 @ <a href="awards.globalreporting.org">awards.globalreporting.org</a> //. We also offer all stakeholders the opportunity to contact us any time via @ <a href="placement@solarworld.de">placement@solarworld.de</a> // and @ <a href="sustainability@solarworld.de">sustainability@solarworld.de</a> //. Since 2009, stakeholders have had the alternative option of sending us an e-mail – anonymously if they so wish – via a contact form on the website.

The Communication on Progress achieved around the 10 Principles of the Global Compact is made through group reporting procedures, which means it is available to all stakeholders. Stakeholder initiatives can even influence the implementation of these Principles, for example via networks built by/ with stakeholders or standards requested by stakeholders.

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# S38 @STAKEHOLDER

Main stakeholders	Instruments		
Employees	Direct contact, employee surveys, existence of works councils, company suggestions scheme		
Specifically applicants	Direct contact, company presentations		
Customers (wholesalers, installers, end customers)	Direct contact, annual customer survey		
Suppliers	Direct contact, supplier surveys		
Shareholders and investors	Direct contact, feedback after road shows, corporate news		
Banks and creditors	Direct contact		
Residents/local population	Direct contact e.g. during events at the SOLARWORLD grounds, in the event of concerns or complaints voiced; for Solar2World projects direct involvement in the project		
Other stakeholders	Instruments		
Analysts/brokers	Direct contact, feedback after road shows, investor days, corporate news		
Governments/agencies	Direct contact, interviews		
Non-governmental organizations (NGOs)	Networks, discussion forums		
The interested public			
The interested public	Reporting, corporate news		
Workforce representatives/ employee associations	Reporting, corporate news  Direct contact in negotiations		
Workforce representatives/			
Workforce representatives/ employee associations (Professional) associations/	Direct contact in negotiations		

# / 4.17 / KEY TOPICS AND CONCERNS RAISED BY STAKEHOLDERS

SOLARWORLD is championing compulsory product recovery in the solar industry. SOLARWORLD is involved in intensive discussions on this matter within the PV Cycle, the Solar Energy Industry Association (SEIA), the Semiconductor Equipment and Materials Institute (SEMI) and with the Silicon Valley Toxics Coalition (SVTC) to drive this issue forward there, too (Principles 7–9, Global Compact).

In the reporting period, there were no extraordinary questions or concerns regarding the sustainability of our business operations not covered under other items of our GRI reporting.

# /5./ MANAGEMENT APPROACH (EC, EN, LA, HR, SO, PR)

SOLARWORLD's management system is outlined in the Management Report. 

Management and Control • p. 030//

#### **ECONOMIC**

Economic success is a fundamental condition for sustainability. It gives us the necessary freedom of action to take account of environmental and societal/social aspects. The Management Report provides detailed information on this dimension. <u>Strategy and action • p. 027// Corporate management and control • p. 030// Energy and climate protection • p. 080// @www.solarworld.de/en/vision // Our commercial success also contributes to the development of the national economy, e.g. by creating jobs and promoting sustainable energy supplies geared to the future. We estimate that 90 percent of our suppliers are certified according to ISO 9001.</u>

## **ENVIRONMENTAL**

Environmental aspects are relevant mainly in our processes, especially in production. Our aim is to take greater account of the environmental impacts of our business partners. We already estimate energy consumption throughout the entire value chain, i.e. beyond company boundaries. By adopting our suppliers' code, we have moved another step in that direction. Involving the widely diverse customer base of wholesalers and installers will be an even greater challenge. To take systematic account of ecological aspects, we have extended ISO 14001 certification to the whole group including the joint venture in South Korea. We estimate that 40 percent of our suppliers are certified according to ISO 14001. It goes without saying that our products – the technology for transforming solar energy into electric power – is also a critical aspect.

## SOCIETY/SOCIAL

Our code of conduct 0  $4.8 \cdot p.$  S29// sets out our ethical principles and behavioral rules and recommendations for all employees and Board members. It defines our working practices, our procedures to ensure compliance with human rights and acceptance of our social responsibility and product responsibility. The code of conduct was approved by the works council in 2010 and signed by the Management Board and Supervisory Board. We are going to communicate the code across the group in 2011.

Under our suppliers' code, our business partners are obliged to comply with all applicable environmental laws, rules and standards and to operate an efficient system to identify and eliminate potential environmental hazards. In addition, our suppliers are encouraged to make their contractors and other business partners comply with these standards, too. We will communicate the suppliers' code in Q1, 2011.

# 11 MANAGEMENT APPROACH

Dimension	Main aspects			
Economic (EC)	<ul> <li>Economic performance</li></ul>			
Environmental (EN)	<ul> <li>Environmental management: Environmental topics, especially energy, water, emissions, discharge water and waste topics</li></ul>			
Society/Social (LA)	<ul> <li>Employment, employee-employer relationship, initial and further training, health and safety, diversity and equal opportunities are part of our HR strategy          <u>Human resources = future development • p. 140//</u>         • Health and safety forms an element of our quality management system         <u>Ocrporate management and control • p. 030// @ annualgroupreport2010.solarworld.de/further-details //</u>         • Health and safety provisions, precautionary measures for operational failure, statutory pay and working hours as well as equal opportunities/a ban on discrimination are part of our code of conduct and our suppliers' code.</li> </ul>			

#### Society/Social (HR)

- Investment and procurement practices, equal opportunities, freedom of association
  and right to collective bargaining as well as a ban on child labor, forced and compulsory labor are governed by our code of conduct and our suppliers' code (and is to be
  included in training schemes for executives).
- Guidelines and processes which should not favor any particular associations or trade unions: In Freiberg, our compliance with the right to freedom of association is apparent by the existence of a works council (current total number of works councils: 15), a representative body for youth and trainees, a representative body for people with severe disabilities and a company bargaining agreement concluded with the IG BCE (Industriegewerkschaft Bergbau, Chemie, Energie) trade union (applicable for: DEUTSCHE SOLAR GMBH, DEUTSCHE CELL GMBH, SOLAR FACTORY GMBH and SOLARWORLD INNOVATIONS GMBH). As a matter of course, we comply with all legal rules and regulations in this regard (especially with the German Works Constitution Act (BetrVG)). Transparent processes in selecting applicants, recruitment, promotion to another location or upwards promotion towards a more senior position and dismissal are ensured through legal, bargaining-related and site-specific rules (e.g. a works agreement for vacancies).
- The conditions for exercising a function in an association or trade union: It is always our aim to seek cooperation with the works council, and people who perform tasks for the works council or for the other bodies mentioned above are given the appropriate time off to do so and provided with the materials and space they need, as well as funding for further training, etc. Alongside day-to-day exchange, there is a regular meeting structure for the parties within the company and within the works council bodies. The works council and the youth and trainees representatives have their own pages/zones on the Intranet. These bodies can also use the notice boards (in all buildings on the Freiberg site) and send e-mails to employees. The trade union that organizes within the company (IG BCE) is also granted appropriate information and communication facilities. The works council and employees naturally also exchange information during open surgeries, workforce meetings and surveys.
- In the U.S., we generally don't have a labor union representing employees.
- Human rights clauses and the abolition of child labor and forced labor: suppliers' code.
- Complaints procedure: Any complaints are handled directly by the respective superior and/or the HR department. In order to maintain anonymity, there shall be SOLARWORLD ombudspersons and a helpline from 2011 (originally planned for 2009).
- We offer training schemes for safety practices with regard to our business operations but
  we do not offer any specific training programs involving human rights aspects for our
  security staff (which isn't necessary because no private security guards are deployed,
  apart from reception staff). The Joint Venture in South Korea has a security service for
  employees' protection (basis is Korean law).
- We respect the rights of indigenous people (no conflict constellations to date).

#### Society/Social (SO)

- Community, corruption, politics, anti-competitive behavior and compliance with the law:
   code of conduct
- Fight against corruption: code of conduct and suppliers' code.

### Society/Social (PR)

 Customer health and safety, product and services labeling, advertising, protection of customer data and compliance with legal provisions: code of conduct.

Dimension	Targets and performance				
Economic (EC)	Target achievement 2009 and 2010 and targets for 2011+ • p. 022 // Strategy and action • p. 027 // Business and general conditions • p. 034 Market position // influencing factors • p. 037 // Business development in the year 2010 • p. 055 // Innovation report 2010 • p. 082 // Income situation • p. 089 // Financial position • p. 093 // Financial standing • p. 097 // Development of business 2011 + • p. 136 //				
Environmental (EN)					
Society/Social (LA)					
Society/Social (HR) Society/Social (SO) Society/Social (PR)	→ Target achievement 2009 and 2010 and targets for 2011+ • p. 022// Corporate governance declaration • p. 040//				
Dimension	Policies				
All dimensions	• Suppliers' code				
Economic (EC)	<ul> <li>• Taken into account in the framework of our quality management</li></ul>				
Environmental (EN)	<ul> <li>Taken into account in the framework of our environmental management system.</li> <li>         ⊕ Corporate management and control • p. 0XX// @ annualgroupreport2010.solarworld.de/further-details//     </li> </ul>				
Society/Social (LA) Society/Social (HR) Society/Social (SO) Society/Social (PR)	Code of conduct: Also covers internationally recognized standards, e.g. those of the United Nations, the ILO and the Vienna Declaration.				
Dimension	Responsibility				
All dimensions	1st level – Board, 2nd level – Managing Director				
Environmental (EN)	3 <sup>rd</sup> level – Divisional Manager and Environmental Manager				
Society/Social (LA) Society/Social (HR)	3 <sup>rd</sup> level – Divisional Manager and Human Resources Department				
Society/Social (SO)	3 <sup>rd</sup> level − Divisional Manager				
Society/Social (PR)	3 <sup>rd</sup> level – Divisional Manager, Environmental Manager and Marketing Department				

Dimension	Training schemes and awareness-raising programs					
All dimensions	Training programs for executives and future executives (leadership skills)					
Environmental (EN)	<ul> <li>Trainings implemented by our quality and environmental management. Apart from this, our employees tend to show a very high level of environmental awareness due to the nature of our business operations.</li> </ul>					
Society/Social (LA)	We already implement training schemes on health and safety. The additional topics are to be included in our executive training programs in future.					
Society/Social (HR) Society/Social (SO) Society /Social (PR)	In future, topics are to be integrated in our executive training programs.					
Dimension	Monitoring and follow-up					
Environmental (EN)	<ul> <li>Monitoring activities are carried out by each individual site on its own. Corporate environmental goals are defined every year and checked at year-end. More specific measures are taken for individual subsidiaries at individual sites. SOLARWORLD holds a groupwide certificate according to ISO 14001.</li> </ul>					
Society/Social (LA)	<ul> <li>Monitoring is effected at the individual sites. Employee surveys are implemented on a regular basis. Measures to be taken by the Board and the HR department are derived from these surveys.</li> </ul>					
Society/Social (HR)	Monitoring and follow-up are partly initiated by the HR departments and partly directly at top management level.					
Society/Social (SO)	Monitoring and follow-up at top management level.					
Society/Social (PR)	Monitoring and follow-up are initiated by the corresponding departments and reported to the top management level.					

Dimension	Key successes
Economic (EC)	⊕ Group Management Report • p. 019// especially Target achievement 2009 and 2010 and targets for 2011+ • S. 022//
Environmental (EN)	<ul> <li>Groupwide certification according to ISO 14001</li> <li>No significant events (i.e. full compliance with legal provisions, no significant spills)</li> <li>Increased share of reused water in total water used ⊚ EN8 • p. S53//</li> <li>CO₂eq balance again improved ⊚ EN16+17 • p. S56//</li> <li>Our Camarillo and Hillsboro sites recorded major achievements in rising to the challenge of recycling waste from operations. Since 2008, the percentage of recycled operating waste increased from 35 to nearly 60 percent. To quote an example, delivery boxes and pallets are further used as ceiling bars, trailers or construction sheds. Furthermore, we were able to improve on our waste avoidance ratio.</li> <li>Due to a major output increase, environmental indicators rose in absolute terms at our Hillsboro site but we managed to achieve significant reductions per unit. From January through November 2010, our consumption of municipal water, power and gas and the amount of discharge water produced decreased by 40 to 50 percent. As a result, costs were reduced by 33 to 65 percent. From January through September, the amount of waste per MWp decreased by a 2-digit percentage value, which made itself felt as cost savings. However, this positive effect is overlaid by additional consumption triggered by the start-up of module production.</li> <li>At our Camarillo site, we were able to reduce energy consumption by making adjustments to manufacturing and de-commissioning older plants.</li> </ul>
Society/Social (LA) Society/Social (HR)	<ul> <li>→ <u>Human resources 2010</u> • p. 100//</li> <li>• Reduction of groupwide staff turnover rate © <u>LA2</u> • p. S64//</li> <li>• Increased proportion of women among Board/Managing Directors as well as among total employees © <u>LA13</u> • p. S71//</li> </ul>
Society/Social (SO) Society/Social (PR)	→ Corporate governance declaration • p. 040//
Dimension	Key shortcomings
All dimensions	<ul> <li>No comprehensive information possible for all indicators as some data are not yet available in this form.</li> <li>Suppliers' code not yet communicated to suppliers (planned for 2011)</li> <li>Code of conduct not yet communicated to employees (planned for 2011)</li> <li>Target achievement 2009 and 2010 and targets for 2011+</li> <li>p. 022//</li> </ul>
Society/Social (LA)	<ul> <li>• Increase of staff turnover rate in Germany ⊚ <u>LA2</u> • p. S64//</li> <li>• Increase in groupwide accident rate ⊚ <u>LA7</u> • p. S66//</li> <li>• Decreased proportion of women among frist level executives ⊚ <u>LA13</u> • p. S71//</li> </ul>

Dimension	Key opportunities and risks				
All dimensions Economic (EC)	→ Report on expected development with its major opportunities and risks • p. 108//				
Environmental (EN)	<ul> <li>Opportunities for solar energy arise from the increasing scarcity of fossil fuels and continuing climate change.</li></ul>				
Society/Social (LA) Society/Social (HR) Society/Social (SO) Society/Social (PR)	<ul> <li>Opportunities arise from our positioning as a responsible Group in international competition.</li> <li>Risks derive primarily from production with regard to health and safety, but compared with other sectors, they should be rated as small. Other risks are the potential loss of credibility and sanctions that would be imposed if fundamental principles were violated.</li> </ul>				
Dimension	Major changes to systems or structures in the reporting period in order to improve performance				
Economic (EC)	(a) Innovation targets and priorities 2010+ • p. 086// Strategy and action • p. 027// Solar value creation 2010: from silicon to module • p. 066//				
Environmental (EN)	Enhanced training programs for environmental compliance				
Society/Social (LA) Society/Social (HR) Society/Social (SO)	→ <u>Human resources 2010</u> • p. 100//				
Society/Social (PR)	→ Corporate governance declaration • p. 040//				
Dimension	Key strategies and procedures for implementing policies or achieving goals				
Economic (EC)	<ul> <li>Procurement optimization</li> <li></li></ul>				
Environmental (EN)	• Environmental management  → Interlinking management tools for sustainable development • p. 031//				
Society/Social (LA) Society/Social (HR) Society/Social (SO) Society/Social (PR)	<ul> <li>Program for executive and future executive development</li> <li></li></ul>				

#### **S46** PERFORMANCE INDICATORS

The error margin (i.e. potential inaccuracies in estimates or measurements) in our quantitative data is so small that it does not impair decision-making by stakeholders. The quantitative statistical error tolerance cannot be calculated. More detailed information on the methods is provided for each of the estimates outlined below.

# **ECONOMIC PERFORMANCE INDICATORS**

# / EC1 / CORE // DIRECT ECONOMIC VALUE GENERATED AND DISTRIBUTED

## ② DIRECT ECONOMIC VALUE GENERATED AND DISTRIBUTED // IN K€

	2010	2009	2008	2007 (continued activities)	2007 (discontinued activities)	Comment
a) Income	1,430,187	1,107,774*	969,978	762,328	10,596	Sales revenues + other operating income + result from shares valued at equity + interest income
Distributed monet	ary value					
b) Operating expenses	-1,086,431	-829,901*	-586,209	-472,965	-10,893	Changes in inventory of products + capitalized own work + material costs + depreciation + other operating expenditure
c) Salaries and company benefits	-126,282	-99,783*	-90,130	-75,004	-2,952	Personnel expenditure
d) Payments to capital providers	-68.853	-46,338*	-104,970	-38,449	-75	Interest expenses + net earnings from financial instruments
e) Payments to public authorities	-55,172	-46,193	-56,838**	-64,178	-905	Taxes on income (for distribution national and international <u>③ 36. Taxes</u> on income • p. 181//)
f) Investments in the community***	-392	-264	-277	-364	n.s.	Donations
Retained monetary value	93,057	85,295	131,554	111,368	-4,229	

 <sup>\*</sup> Exchange rate wins and losses were originally reported in the financial result.
 \*\* Editorial error (correct in Management Report 2008): At this point € 56,428k were incorrectly shown in the Group Annual Report 2008.
 \*\*\* Donations in money and in kind (Donations to political parties are not included and have no longer been made since 2010.)

Reasons for partial reporting: Information on this indicator that discloses more data than in the Management Report and the annual accounts is confidential (explanation type 3). Furthermore, we do not break down the figures by country and region as we do not consider them to be essential at the moment and we therefore focus more on the performance of the entire group (explanation type 1). (a) Comments on the income statement • p. 176//

## / EC2 / CORE // FINANCIAL IMPLICATIONS DUE TO CLIMATE CHANGE

We take account of the opportunities and risks related to climate change for our business activities. 

The world energy market • p. 061// Individual risks • p. 111// Opportunities • p. 127//

# / EC3 / CORE // COVERAGE OF ORGANIZATION'S DEFINED BENEFITS PLAN

In Germany, Solarworld ag offers a company pension scheme for employees in the form of "direct insurance" and the "pension fund", either funded by the employer or with transformation of salary into pension rights (with employer subsidy). Employees who were employed at the former Munich site are entitled to "direct pension commitments", funded directly by the company. In 2010 the commitments amounted to  $\in 8,029$ k (2009:  $\in 7,995$ k).  $\bigcirc 58$ . Non-current and current financial provisions • p. 195// On top of this, we are planning to introduce a company-specific offer for private pension schemes (under the "Riester pension scheme").

In the U.S., there is a program for retirement savings, the SOLARWORLD 401k program. Under this program, employees may receive a company match of funds at a rate of US\$ 0.50 for every US\$ 1.00 contributed by the employee – up to a maximum of 3 percent of annual base rate of pay. All 401k regulations in the U.S. tax code apply to this program, which is administered by Diversified Investment Advisors. Eligibility for this program begins after 90 days of employment in regular status. It is a voluntary program for all eligible employees. Therefore, participation rates vary from site to site. Participation rates are 37 percent of regular employees as of the end of 2010 (2009: 42).

There are no specific programs at the other sites. The amount paid into the programs is determined by the employees on conversion of compensation. Where funding comes from the employer, the amount is specified in the contract of employment. Participation is voluntary. 

Muman resources 2010 • p. 100// On the basis of the data available to us, no statement can be made concerning the extent to which this will be used since these data were not collected on a uniform basis so that it is impossible to draw up statistics (explanation type 2). We hope to address this issue in the mid-term.

# / EC4 / CORE // FINANCIAL ASSISTANCE RECEIVED FROM GOVERNMENT

## ③ FINANCIAL ASSISTANCE RECEIVED FROM GOVERNMENT // IN K€

	2010	2009	2008	2007 (continued operations)	2007 (discontinued operations)
Investment grants	14,548	10,461	10,210	8,009	161
Research grants	2,179	1,813	2,353	3,678	0

There is no government body holding shares in Solarworld.

## / ECG / CORE // SELECTION OF LOCALLY BASED SUPPLIERS

The term "locally based" is defined in a way that is analogous to our segments (IAS 14). ② <u>Consolidated financial statements</u> • p. 151// There is no company guideline under which preference is given to local suppliers. The geographical position plays a minor role in selecting suppliers since the equipment and commodity market is an international market. For our (not-for-profit) Solar2World projects, we involve local partners as far as possible (in particular for rack technology and installation).

## / EC? / CORE // LOCALLY BASED HIRING OF EMPLOYEES

We are an international Group and mainly recruit locally at our various sites, although there is no company guideline on this. We try to keep the number of "expatriates" down, but we need some employees from our existing subsidiaries and from Head Office at the location because that is important for harmonization of differences between sites. Under various non-discrimination provisions like the federal agreement on application of equal opportunities legislation (AGG) in Germany and rules and regulations by the Equal Employment Opportunity Commission (EEOC) as well as under Affirmative Action in the U.S. and pursuant to our groupwide code of conduct, local candidates must not be given preference nor discriminated against in recruitment process.

We adjusted our definition of "senior executives" (German: "leitende Angestellte") to the definition under the German Works Constitution Act (BetrVG), under which executives include board members and, where applicable, managing directors. However, we disclose such information also for the 1<sup>st</sup> level of management, too, because we believe this distribution is relevant as well (in doing so, we are exceeding GRI requirements).

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# (14) LOCALLY BASED HIRING OF EMPLOYEES

Locally hired executive staff/employees	2010	2009	2008	2007
Percentage local (board members and managing directors)				
Germany	100 %	100 %	100 %	100 %
France	0%	n.s.	n.s.	n.s.
Spain	50%	0 %	0%	0%
Singapore	0%	0%	0%	0%
South Africa	0%	0%	0%	0%
U.S.	100 %	50 %	0%	0%
Percentage local (1st management level)	'			
Germany	100 %	100 %	100 %	100 %
France	100 %	n.s.	n.s.	n.s.
Spain	0%	100 %	100%	100 %
Singapore	100 %	100 %	0%	0%
South Africa	0%	0 %	100 %	0%
U.S.	91%	81 %	83 %	76%

# CORE // INFRASTRUCTURE INVESTMENTS AND SERVICES PROVIDED MAINLY FOR PUBLIC BENEFIT

Our Solar2World projects actively involve the local stakeholders (i.e. members of the community, users) in the project design. Additional investments in infrastructure and services provided mainly for public benefit were not made.

# S50 ENVIRONMENTAL PERFORMANCE INDICATORS

## /EN1/ CORE // MATERIALS USED

Exact disclosure of the materials used by weight and volume is not possible since this is confidential business information. Since we do not publish our production figures either, we cannot disclose any exact volumes for usage of materials (explanation type 3). The material used consists almost exclusively of non-renewable substances but a large proportion is capable of recycling.

In our production, we use the following substances that are generally classified as dangerous: Hydrogen fluoride (HF), lead (Pb), nitric acid (HNO $_3$ ), phosphorous oxychloride (POCl $_3$ ), silane (SiH $_4$ ), sodium hydroxide (NaOH), hydrochloric acid (HCl), potassium hydroxide (KOH) as well as minimal quantities of ammonia (NH $_3$ ).

#### / EN2 / CORE // RECYCLING INPUT MATERIALS

The rated etching capacity of our recycling unit "SolarMaterial" for recovery of silicon is currently 1,700 tonnes per annum, thanks to technical improvements and the elimination of production bottle-necks. This core competency is of high strategic relevance in terms of cost dilution, raw material supplies and raw material efficiency. For this reason, we cannot disclose exact quantities as this information is subject to confidentiality (explanation type 3). Also, we have our packaging materials recycled.  $\textcircled{EN27} \cdot p.S61$ // Other materials occurring in the course of the production of solar products are reused by us internally but have so far not been statistically recorded (explanation type 2). We intend to address this issue in the mid-term. We have to analyze the possible level of detail of such disclosures since some details have to be treated as confidential (explanation type 3).

# / EN3 / CORE // DIRECT PRIMARY ENERGY CONSUMPTION

# **(15) DIRECT PRIMARY ENERGY CONSUMPTION**

	2010	2009	2008	2007
Direct primary energy consumption in MWh (Germany & U.S.)	56,118 e	47,042*	36,313*	16,307 e
of which natural gas	55,949 e	46,908	n.s.	n.s.
of which heating oil	5 e	3	n.s.	n.s.
of which diesel	12 e	10	n.s.	n.s.
of which gasoline	0.2 e	0.1	n.s.	n.s.
Direct primary energy consumption in MJ (Germany & U.S.)	202,025,498 e	169,351,891*	130,726,800	58,706,207 e
Direct primary energy consumption in MWh (Spain, South Africa, Singapore)	24 e	24 e	33 e	49 e
Direct primary energy consumption in MWh (total)	56,142 e	47,066*	36,346*	16,356 e
Direct primary energy consumption in MWh				
(South Korea)	0	0	n.s.	n.s.

Joint Ventures: Information on our joint venture (South Korea) is not included in the group figures (only fully consolidated companies are included).

## Estimates and calculations:

e: estimated (geschätzt)

The information for the month of December (Germany & U.S.) was estimated on the basis of the prior month as invoices had not yet come to hand at the time of reporting. Consumption figures for the sales offices (Spain, South Africa, Singapore) cannot be measured (items are not broken out by the landlord), but are not significant either. They are estimated on the basis of the number of employees and the Bonn consumption data. An update of the figures can be given for the reporting in the context of the CDP (May 2011).

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<sup>\*</sup> Data from previous reports have been adjusted.

# / EN4 / CORE // INDIRECT PRIMARY ENERGY CONSUMPTION

## 16 INDIRECT PRIMARY ENERGY CONSUMPTION // IN MWH

	2010	2009	2008	2007
Indirect primary energy consumption (group)	411,287 e	321,100 e***	233,979 e***	176,070 e***
Indirect primary energy consumption (Germany & U.S.)	411,207 e	321,020	233,900 e***	175,982 e***
of which electricity*	410,582 e	320,355 e	233,144 e***	175,183 e***
of which local heating	625 e	665	756 e***	799 e***
Indirect primary energy consumption (Spain, South Africa, Singapore)**	80 e	80 e***	79e***	88 e***
Share of renewable energy sources in electricity bought (Germany)	13.16%e	3.48%e	10.17 %e***	n.s.
Indirect primary energy consumption (South Korea)	8,921e	5,291 e	n.s.	n.s.

Joint Ventures: Information on our joint venture (South Korea) is not included in the group figures (only fully consolidated companies are included).

#### Estimates and calculations:

e: estimated

- \* The share accounted for by SOLARWORLD AG was estimated for calendar years 2008, 2009 and 2010 as for these years invoices have to be used that cover a period of several months that stretches beyond the end of the year into a new year.
- \*\* For the year 2009, values for the locations of Spain and Singapore were documented. The location in South Africa is comparable to the location in Spain which is why we used the Spanish consumption figure as an estimate. The prior years were also adjusted. The information from Singapore is available, for the Spanish and South African locations the figures of the year 2009 were used as a basis. For the year 2010, the value of 2009 was assumed.
- \*\*\* Data from previous reports have been adjusted.

The information for the month of (Germany & U.S.) were each estimated on the basis of the prior month as the invoices had not yet come to hand at the time of reporting. The consumption figures for the sales offices (Spain, South Africa, Singapore) cannot be measured (items are not broken out by the landlord), but are not significant either. They are estimated on the basis of the number of employees. An update of the figures can be given for the reporting in the context of the CDP (May 2011). An estimate of the Megajoule (MJ) for the primary energy required for the generation of the secondary energy (based on individual fuel consumption, standard figures for power and heat or estimates) was not possible due to the data situation (explanation type 2) and is to be tackled in the mid-term. It is currently investigated how an exclusive purchase of power form renewable sources can best be implemented.

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# $^{/\,\,\text{EN3}\,+\,\,\text{EN4}\,/}$ 17) ENERGY PAYBACK

This goes beyond the GRI requirements.

Region/Country	Representative place	Power yield (kWh/kWp)	Energy return time (years)
Southern Europe	Sofia	1,270	1.088
Italy	Perugia	1,260	1.097
France	Clermont-Ferrand	990	1.396
Spain	Madrid	1,580	0.875
U.S.	San Francisco	1,670	0.828
Germany	Bonn	940	1.470

Energy payback: On the basis of a Life Cycle Analysis, the energy payback for multicrystalline modules from our Freiberg production, if installed with south orientation and at optimal roof inclination are the ones mentioned above for each region. In 2008, the energy payback was still 3.5 years in Germany (cf. Jungbluth et al.: Life Cycle Assessment of Photovoltaics: Update of ecoinvent data v2.0, Working Paper, ESU-services Ltd. (2008)).

# / EN8 / CORE // TOTAL WATER WITHDRAWAL

# 18 TOTAL WATER WITHDRAWAL // IN m<sup>3</sup>

	2010	2009	2008	2007
Total water withdrawal (Germany & U.S.)	1,429,148e	1,115,009 e*	845,961*	1,006,428
Surface water (Germany & U.S.)	638,751e	481,931 e	481,931*	445,000
Water from communal water supply (Germany & U.S.)	790,397 e	633,078 e*	364,030*	561,428
Recirculated water (Germany & U.S.)	216,894e	206,520 e	121,162	n.s.
Share of recirculated water in total water withdrawal (Germany & U.S.)	15.18 % e*	18.52 % e*	14.32 %*	4.61%*
Water withdrawal (South Korea)	11,797	5,649 e	n.s.	n.s.

Joint Ventures: In our joint venture Joint Solar Silicon (silicon production) water is mainly used for cooling purposes in a circulating system.

#### Estimates and calculations:

e: estimated

The small value of water from communal water supply 2008 is due to the change in production in Camarillo.

As the invoices for the year 2010 and the final invoices for the year 2009 had not yet come to hand at the German locations the withdrawals were estimated. The value for the holding company was estimated for 2009 on the basis of the prorated consumption of the old building and the consumption of the new building (invoice/meter reading).

The data for the sales offices in Spain, South Africa and Singapore were not available but are not significant, i.e. they are of limited scope (explanation type 1).

<sup>\*</sup> Data from previous reports have been adjusted.

# S54 /EN11 / CORE // LAND IN OR ADJACENT TO PROTECTED AREAS OR AREAS OF HIGH BIODIVERSITY VALUE

We already provided detailed disclosures on this range of topics in our report for 2007. We do not operate any facilities located in or adjacent to protected areas or comprise any areas with high biodiversity outside protected areas.

#### / EN12 / CORE // IMPACT ON BIODIVERSITY

Our activities, products or services at our sites do not have any major impacts on biodiversity in protected areas or in areas of high biodiversity outside protected areas.

#### / EN16 / CORE // GREENHOUSE GAS EMISSIONS

#### (19) GREENHOUSE GAS EMISSIONS

	2010	2009	2008	2007*	2006	2005
Direct and indirect emissions in tCO <sub>2eq.</sub> (Group, CDP Scope 1+2)	179,137 e	139,285 e***	96,310 e***	76,729 e***	41.402 e	40.624 e
Direct emissions in tCO <sub>2eq.</sub> (Group, CDP Scope 1)	11,692 e**	9,538 e	8,689 e	10,984 e	3.513 e	5.295 e
Indirect emissions in tCO <sub>2eq.</sub> (Group, CDP Scope 2)	167,445 e	129,747 e	87,622 e	65,745 e	37.889 e	35.329 e
Direct and indirect emissions in tCO <sub>2eq.</sub> (South Korea)	4,143 e	4,598 e	n.s.	n.s.	n.s.	n.s.

Joint Ventures: Information on our joint ventures is not included in the calculation of the GHG emissions.

#### Estimates and calculations:

e: estimated

- \* The final data for 2007 exclude discontinued operations.
- ${\tt **} \quad \textit{Including the sales force Germany}$
- \*\*\* Data from previous reports have been adjusted.

The data were identified with the help of the calculation tools of the GHG Protocol of CDP. As in the previous year, the extrapolation of electricity mix emissions was based on the most recent values of the International Energy Agency (IEA) and the prior year's values were appropriately updated (as at CDP, May 2010). An update of the figures can be provided for the reporting in the context of the CDP (May 2011).

The data for the direct primary energy consumption at the sales locations in Spain, South Africa and Singapore were estimated on the basis of the number of employees and the consumption figures at the German sales location. The data for the indirect primary energy consumption in South Africa were estimated on the basis of the number of employees and the consumption figures of the sales office in Spain. Furthermore, the emissions of the vehicle fleet were estimated on the basis of the previous year's figures (mileage). The error rates that may be caused by the estimates and the calculation tools are not known.

# / EN17 / CORE // OTHER GREENHOUSE GAS EMISSIONS

# **20 OTHER GREENHOUSE GAS EMISSIONS**

	2010	2009	2008	2007*
Emissions offset in the framework of the NetJets Climate Initiative in tCO <sub>2eq.</sub>	182.48	240.68	266.74	49.26

<sup>\*</sup> In 2007 we did not sign the contract with NetJets until the end of the year and subsequently directly agreed to offset emissions. We offset part of our flight emissions (100 % of our emissions, which account for NetJets plane) by participating in the NetJets Climate Initiative. We are currently examining how to optimally offset the emissions ( $CO_{2eq}$ ) of all business air travel in the long term.

This indicator includes emissions of our suppliers, the vehicle fleet of our logistics services companies, emissions from business travel and emissions from collection systems for packaging and used products. However, these data have not yet been collected this far so that statistics cannot be compiled (explanation type 2). Our examination of the facts and circumstances has shown that collecting these data would require a major input of time and effort. Moreover, double counting could occur since other companies, too, report their data in the framework of the CDP. We intend to address this issue in the long-term but, for the time being, we will mainly focus on reducing our indirect greenhouse gas emissions (e.g. from energy consumption).

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# / EN16 ② CARBON FOOTPRINT

This goes beyond the GRI requirements.

	2010	2009	2008	2007*	2006	2005
Emissions saved in million tCO <sub>2eq.</sub>	7.39 e	4.60 e	3.10 e**	2.10 e**	1.90 e	1.20 e
Environmental damage avoided in m€	517 e	319 e	220 e**	144 e**	130 e	84 e
Average emissions intensity in $gCO_{2eq}$ /Wp	103.3 e	164.5 e	175.8 e			
Emissions saved/groupwide emissions caused	41 e	33 e	32 e**	27 e**	46 e	30 e

#### Estimates and calculations:

e: estimated

- \* The final data for 2007 exclude discontinued operations.
- \*\* Data from previous reports have been adjusted.

#### Assumptions:

Global Warming Potential (GWP): The GWP factors of the IPCC (cf. IPCC Fourth Assessment Report: Climate Change 2007) are used as a basis.

Emissions avoided: We only include the modules sold by us in emissions avoided, since we do not have sufficient information available to correctly present the effect of our wafers. This would require knowing details of the modules produced from these wafers and knowing the regions to which they are sold.

Basis of calculation: modules sold in the period under review, assuming a module life of 25 years

Emissions produced: The calculation is based on the power mix data mentioned above and the GWP factors. The figures include the energy consumed to produce the interim products (wafers) sold by us; however, they exclude the energy consumed by our joint ventures and specialized contract manufacturers.

Environmental damage avoided: We refer to the study by Krewitt and Schlomann (cf. Krewitt, Wolfram/Schlomann, Barbara: Externe Kosten der Stromerzeugung aus erneuerbaren Energien im Vergleich zur Stromerzeugung aus fossilen Energieträgern (2006)), which estimates the costs as  $70 \in tCO_{2ea}$ .

Explanation concerning the product life cycle: By analogy with the calculations for the CDP, we only include fully consolidated companies since we exercise financial and operational control over these companies. (a) 3.6 • p. 0XX// A comprehensive analysis of the entire product life cycle would require inclusion of the proportionate savings in solar systems generated by the interim products (wafers) sold by us as well as consumption by suppliers and service providers. According to our estimates, consumption by SOLARWORLD accounts for around 35 percent of total consumption in the product life cycle, while consumption attributable to suppliers and service providers accounts for around 65 percent (cf. Jungbluth et al.: Life Cycle Assessment of Photovoltaics: Update of ecoinvent data v2.0, Working Paper, ESU-services Ltd. (2008)). The figures may be updated for the CDP reporting (in May 2011). The original estimate is updated annually as more recent emission factors of the Greenhouse Gas Protocol are available.

# / EN19 / CORE // EMISSIONS OF OZONE-DEPLETING SUBSTANCES

There are no emissions of ozone-depleting substances.

# $^{/\,\text{EN20}\,/}$ Core $/\!/$ No $_{\!_{X}}\!$ , so $_{\!_{X}}\!$ and other air emissions

## 22 NO<sub>y</sub>, SO<sub>y</sub> AND OTHER AIR EMISSIONS

2010	2009	2008	2007*
5.51	3.30	1.85	0.33
0.22	0.20	0.15	n.s.
20.63	10.16	6.94	7.25
0.35	0.22	0.64	2.16
0.46	0.44	0.30	0.30
1.94	1.64**	1.13	n.s.
29.11	15.97**	11.01	10.04
	5.51 0.22 20.63 0.35 0.46 1.94	5.51         3.30           0.22         0.20           20.63         10.16           0.35         0.22           0.46         0.44           1.94         1.64**	5.51         3.30         1.85           0.22         0.20         0.15           20.63         10.16         6.94           0.35         0.22         0.64           0.46         0.44         0.30           1.94         1.64**         1.13

#### Estimates and calculations:

e: estimated

The substances mentioned above only occur in our U.S. production and fall below the statutory limits. The increases are driven by the strong production growth. For this reason, we expect a further rise in absolute figures for the subsequent year. At the time of data collection, individual locations were not yet able to communicate any up-to-date figures for the years 2009 and 2008 so that our estimate was based on prior-year figures.

<sup>\*</sup> The final data for 2007 are shown without discontinued operation.

<sup>\*\*</sup> Data from previous reports have been adjusted.

# / EN21 / CORE // TOTAL WATER DISCHARGE

## 23 TOTAL WATER DISCHARGE // IN m<sup>3</sup>

	2010	2009	2008	2007
Total waste water discharges (Germany & U.S.)	1,345,832 e	902,912 e*	820,449 e*	793,224 e
Water discharged into the municipal drainage system (Germany & U.S.)	1,339,397 e	896,477 e*	814,113 e*	793,224 e
Recirculated water (Germany & U.S.)	216,894 e	206,520 e	121,162 e	n.s.
Water withdrawal (South Korea)	9,433	n.s.	n.s.	n.s.

#### Estimates and calculations:

e: estimated

The figures are currently still estimated. As the last invoices for the year 2010 had not yet come to hand we work with a projection. At the time of the data collection, individual locations were not yet able to communicate any official figures for the year 2008 and therefore we had to fall back on figures of previous years. The precipitation volumes are not measured. Only in Germany, based on the built-up areas, a fee has to be paid (this corresponds to  $6,435 \, \text{m}^3$ ). This is why these data cannot be shown for the group (explanation type 2). We want to tackle this point in the mid-term.

The data for the sales offices in Spain, South Africa and Singapore were not available but are of limited scope, i.e. not material either (explanation type 1). Data on the precise processing method, on water reuse by other organizations as well on the water quality of the total water volume and the waste water/process water (e.g. BOD (Biochemical Oxygen Demand) and TSS (Total Suspended Solids)) have so far not been recorded and statistics can therefore not be produced (explanation type 2). We want to tackle this point in the mid-term.

<sup>\*</sup> Data from previous reports have been adjusted.

# / EN22 / CORE // WASTE BY DISPOSAL METHOD

## **24** WASTE BY DISPOSAL METHOD

	2010	2009	2008	2007
Total weight of waste in tonnes (Germany & U.S.)	20,724e	13,010 e	9,383 e***	11,488
of which hazardous waste in tonnes (Germany & U.S.)*	2,265 e	2,806 e	3,471 e***	7,255***
of which recycled or reused (Germany & U.S.)*	4%	0%	34 %e	82 %
of which non-hazardous waste in tonnes (Germany & U.S.)	18,459 e	10,204 e	5,911e***	4,172 e***
of which recycled or reused (Germany & U.S.)**	76 % e	37 % e	10 % e***	7%
Total weight of waste in tonnes (South Korea)	337	n.s.	n.s.	n.s.
of which hazardous waste in tonnes (South Korea)	0.24	n.s.	n.s.	n.s.
of which recycled or reused (South Korea)	80%	n.s.	n.s.	n.s.
of which non-hazardous waste in tonnes (South Korea)	336	1.127 e	n.s.	n.s.
of which recycled or reused (South Korea)	70%	n.s.	n.s.	n.s.

Joint ventures: The group figures do not include data on our joint venture solarworld korea Ltd.

#### Estimates and calculations:

e: estimated

- \* At the Camarillo site, a big amount of hazardous waste had been generated, which, however, had been recycled or reused to 100 %. In the course of the stepwise change in production, this kind of waste is no more generated since 2009.
- \*\* For the years 2009, 2008 and 2007, U.S. data are available and as of 2010 data from Freiberg, too. This explains the percentage increase in the year 2010.
- \*\*\* Data from previous reports have been adjusted.

At the time of data collection, individual locations were not yet able to communicate any official figures for 2008 so that we had to fall back on figures from previous years.

Data on other disposal methods have not yet been compiled to date so that it is not possible to compile any statistics (explanation type 2). We intend to address this issue in the mid-term. The data for our sales offices in Spain, South Africa and Singapore were not availabe but are not material, i.e. of minor scope (explanation type 1).

# S60 /en23/ core // significant spills

In the reporting period, as in the previous year, there were no significant spills (chemicals, oils, fuels).

# / EN26 / CORE // INITIATIVES TO MITIGATE ENVIRONMENTAL IMPACTS

The products of SOLARWORLD have no significant environmental impact in terms of material input, water consumption, emissions, discharge water, noise or waste. The modules can be recycled at the end of their useful lives.

In addition to that, we document the sealed surface since 2009. (These data exceed the GRI requirements.)

## 25 INITIATIVES TO MITIGATE ENVIRONMENTAL IMPACTS // IN m<sup>2</sup>

	2010	2009	2008
Total plant area (group)	413,279**	392,697*	392,697*
of which sealed area (group)	128,580**	n.s.	n.s.
of which built-over area (group)	55,693**	n.s.	n.s.
Total plant area (South Korea)	69,315	69,315	n.s.
of which sealed area (South Korea)	13,083	13,083	n.s.
of which built-over area (South Korea)	n.s.	n.s.	n.s.

 ${\it Joint ventures: The group figures \ do \ not \ include \ the \ data \ on \ our joint \ venture \ solar world \ korea \ ltd.}$ 

### Estimates and calculations:

- \* The data only refer to our Hillsboro site.
- \*\* The data refer to our sites in Hillsboro, Camarillo and Vancouver.

# / EN27 / CORE // PACKAGING MATERIALS

## **26 PACKAGING MATERIALS**

	2010	2009	2008	2007
Weight of packaging material in tonnes (Germany)	996.16	860*	448	374*
Carton/cardboard	141.82	121.10	91.81	76.23
Wood	772.51	666.79	350.92	293.33
Stretch film	20.05	17.32	4.46	3.70
Plastics	51.73	46.24	0.00	0.00
Strapping bands	9.08	7.81	0.81	0.67
Polystyrene/PUR	0.96	0.82	0.00	0.00
Type separated and recycled	100 %	100 %	100%	100%
Directly recycled	100%	100%	100%	100 %

#### Estimates and calculations:

The packaging material serves to protect our products during transportation and is not used for advertising purposes. In Germany, we have contracted out recycling and reuse operations to Interseroh Dienstleistungs GmbH. The duly notified quantities of authorized packaging materials are determined by Interseroh on the basis of the inspection specification (as at September 2007) (in particular based on purchasing statistics, invoices and delivery notes) and are attested by auditors. These figures do not include materials taken back and recycled via a different collection system or in the framework of our own collection system as well as packaging material which has verifiably been exported. In the U.S., we internally recycle the bulk of the packaging materials used by our U.S. sites.

At our distribution sites in Spain, South Africa and Singapore, the only waste materials are office and kitchen waste, which are disposed of in accordance with local legislation.

These data have not yet been collected at a groupwide level so that it is impossible to establish statistics (explanation type 2). We intend to address this issue in the mid-term.

# / EN28 / CORE // SANCTIONS FOR NON-COMPLIANCE WITH ENVIRONMENTAL LAWS AND REGULATIONS

As in the previous year, no significant fines or non-monetary sanctions were imposed on SOLARWORLD for non-compliance with environmental laws and regulations. This also applies to the joint ventures of SOLARWORLD.

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<sup>\*</sup> Data from previous reports have been adjusted.

# S62 SOCIAL PERFORMANCE INDICATORS

# /LA1/ CORE // TOTAL WORKFORCE BY EMPLOYMENT TYPE, EMPLOYMENT CONTRACT AND REGION

# 27 TOTAL WORKFORCE BY EMPLOYMENT TYPE, EMPLOYMENT CONTRACT AND REGION

		Geri	many		U.S.				
	2010	2009	2008	2007	2010	2009	2008	2007	
Total headcount (incl. temporary staff)	2,075	1,888	1,625	n.s.	1,257	822	855	n.s.	
Total headcount (excl. temporary staff)	1,495	1,341	1,198	1,000	861	642*	609	400	
Employees (excl. trainees)	1,408	1,255	1,115	n.s.	861	642*	609	n.s.	
Women	276	239	207	n.s.	241	174	128	n.s.	
Men	1,132	1,016	908	n.s.	620	470	481	n.a.	
Part-time workers	41	35	19	17	0	1	1	1	
Women	34	26	13*	11	0	1	0	0	
Men	7	9	6	6	0	0	1	1	
Employees on permanent contract	1,274	1,186	1,099 e**	n.s.	0	0	0	n.s.	
Women	242	230	240 e**	n.s.	0	0	0	n.s.	
Men	1,032	956	895 e**	n.s.	0	0	0	n.s.	

	Spain				Singapore				
	2010	2009	2008	2007	2010	2009	2008	2007	
Total headcount (incl. temporary staff)	4	4	5	n.s.	7	8	10	n.s.	
Total headcount (excl. temporary staff)	4	4	5	6	7	8	10	12	
Employees (excl. trainees)	4	4	5	n.s.	7	8	10	n.s.	
Women	1	1	1	n.s.	3	2	3	n.s.	
Men	2	3	4	n.s.	4	6	7	n.s.	
Part-time workers	0	0	0	n.s.	0	0	0	n.s.	
Women	0	0	0	n.s.	0	0	0	n.s.	
Men	0	0	0	n.s.	0	0	0	n.s.	
Employees on permanent contract	3	4	5	n.s.	7	8	10	n.s.	
Women	1	1	1	n.s.	3	2	3	n.s.	
Men	2	3	4	n.s.	4	6	7	n.s.	

	South Africa				France	Group			
	2010	2009	2008	2007	2010	2010	2009	2008	2007
Total headcount (incl. temporary staff)	4	3	3	n.s.	6	3,347	2,725	2,498	n.s.
Total headcount (excl. temporary staff)	4	3	3	2	6	2,371	1,998*	1,825	1,420***
Employees (excl. trainees)	4	3	3	n.s.	6	2,290	1,912	1,742	n.s.
Women	2	2	2	n.s.	1	524	418	341	n.s.
Men	2	1	1	n.s.	5	1,765	1,496	1,401	n.s.
Part-time workers	0	0	0	n.s.	0	41	36	20	n.s.
Women	0	0	0	n.s.	0	34	27	13*	n.s.
Men	0	0	0	n.s.	0	7	9	7	n.s.
Employees on permanent contract	0	3	3	n.s.	6	1,290	1,201	1,117	n.s.
Women	0	2	2	n.s.	1	247	235	246	n.s.
Men	0	1	1	n.s.	5	1,043	966	907	n.s.

#### Estimates and calculations:

- ${}^*\quad \textit{Data from previous report have been corrected}.$
- \*\* Values for the Bonn location were estimated.
- \*\*\* Continuing operations only

A comparison of total headcount numbers and the number of employees on permanent contract shows that the latter reflects relatively stronger growth. Due to the changed market situation, some new employment contracts initially entail a fixed term. Decisions on extensions of the contract terms or removals of time limitations are taken timely of the expiry of the contracts.

③ Human resources 2010 • p. 100//

For the U.S., a breakdown into permanent and fixed-term employment contracts is not possible due to legal differences (weak protection from dismissal, frequent lack of written employment contracts) (reason type 3). 

Future orientation of the group • p. 136//

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# /LA2/ CORE // EMPLOYEE TURNOVER

# **28 EMPLOYEE TURNOVER**

_		Germany		U.S.			
Employees leaving the company	2010	2009	2008*	2010	2009	2008*	
voluntary terminations*	36	23	18	71	34	44	
of which women*	7	5	2	17	7	19	
terminations by employer	28	17	n.s.	55	108	n.s.	
of which women	10	3	n.s.	11	35	n.s.	
Employee turnover ratio	4.3 %	3.0 %	n.s.	14.6%	22.1 %	n.s.	

		Spain			Singapore			
Employees leaving the company	2010	2009	2008*	2010	2009	2008*		
voluntary terminations*	0	0	1	2	2	2		
of which women*	0	0	0	1	1	1		
terminations by employer	0	0	n.s.	0	0	n.s.		
of which women	0	0	n.s.	0	0	n.s.		
Employee turnover ratio	0.0%	0.0%	n.s.	28.6 %	25.0 %	n.s.		

		South Africa			Group		
Employees leaving the company	2010	2009	2008*	2010	2010	2009	2008*
voluntary terminations*	0	1	0	0	109	60	65
of which women*	0	1	0	0	25	14	22
terminations by employer	1	0	n.s.	1	85	125	n.s.
of which women	0	0	n.s.	0	21	38	n.s.
Employee turnover ratio	25.0 %	33.3 %	n.s.	16.7%	8.2 %	9.3 %	3.6 %

#### Estimates and calculations:

The large number of voluntary terminations in the U.S. is primarily due to restructuring at the Camarillo site.

At the Freiberg site, the employee turnover rate increased year-on-year since a number of employees reached retirement age but also due to some employees opting for new professional challenges outside of SOLARWORLD and terminating their employment contract due to strong demand for technical and managerial staff (in particular engineers). Some employment contracts were terminated by the employer; their employment contracts were terminated by notice of termination or termination agreement. In the U.S., the employee turnover ratio has decreased. The ratio corresponds to the average value in the High Tech Sector. The turnover ratio for temporary employees, too, corresponds to the sector average.

Based on the data available to us, a breakdown by age group was not possible since these data have not yet been recorded on a uniform basis so that it was not possible to draw up any statistics (explanation type 2). We intend to address this issue in the mid-term. We will have to analyze the possible level of detail in disclosing the data since some details are confidential (explanation type 3). (3) Human resources 2010 • p. 100//

 $<sup>^{\</sup>star}\,In\;the\;year\;2008,\,voluntary\;terminations\;and\;terminations\;by\;the\;employer\;were\;reported\;together.$ 

# /LA4/ CORE // EMPLOYEES COVERED BY COLLECTIVE BARGAINING AGREEMENTS

# (3) EMPLOYEES COVERED BY COLLECTIVE BARGAINING AGREEMENTS

	Germany			U.S.				
_	2010	2009	2008	2010	2009	2008		
Employees falling under collective agreements	1,263	1,147	903	0	26	79		
Ratio (in relation to total headcount, excl. temporary employees)	84%	86%	75%	0%	4 %	13 %		
		Spain			Singapore			
_	2010	2009	2008	2010	2009	2008		
Employees falling under collective agreements	2010	<b>2009</b> 0	2008	2010	0	<b>2008</b> 0		

	South Africa			France	Group		
	2010	2009	2008	2010	2010	2009	2008
Employees falling under collective agreements	0	0	0	0	1,267	1,173	982
Ratio (in relation to total headcount, excl. temporary employees)	0%	0%	0%	0%	53 %	59 %	54%

#### Estimates and calculations:

Not all Freiberg employees fall under the arrangements and provisions of the existing company agreement. However, since the company agreements, informal agreements etc. represent collective bargaining agreements, the collective agreements cover all employees as a matter of principle, with the exception of the company boards (management boards and managing directors) and executives ("leitende Angestellte", see German Industrial Relations Act for definition). At our U.S. sites, the share of employees falling under collective agreements has decreased to zero as the only Union existed at the Vancouver site, which was closed down in 2010. § 5. Management approach (EC, EN, LA, HR, SO, PR) • p. S39/( Main aspects Society/Social • p. S40//

# S66 /La5/ core // minimum notice periods regarding significant operational changes

The obligations of the employer with respect to significant changes in operations are set out by legislation, e.g. in Germany by the Works Constitution Act (BetrVG), sections 90, 92, 106, 111. In the U.S., the notification periods are for example regulated by the Worker Adjustment & Retraining Notification Act or the National Labor Relations Act. The minimum notice periods differ depending on the application case and can therefore not be presented comprehensively here (explanation type 1) .

# /LA7/ CORE // INJURIES, OCCUPATIONAL DISEASES, LOST DAYS, ABSENTEEISM AND WORK-RELATED FATALITIES

## ® INJURIES, OCCUPATIONAL DISEASES, LOST DAYS, ABSENTEEISM AND WORK-RELATED FATALITIES

	Germany			U.S.			
	2010	2009	2008	2010	2009	2008	
Absenteeism rate	3.8%	4.1%	3.1%	1.5%	2.0%	1.5 %	
Absence due to sickness in calendar year (in hours)	114,923	111,126	71,502	24,716	27,916	19,469**	
Actual target working hours in calendar year (total workforce, in hours)	2,987,371	2,739,026	2,302,875	1,614,113	1,371,656	1,256,320	
Sickness rate (percentage of employees who were sick at least once in the entire fiscal year)	68.8%	70.5%	59%	87.9%	100%	100 %****	
Number of employees reporting sick in the calendar year	1,028	946	707	763	647	n.s.	
Accident rate in ‰ (i.e. per 1,000 employees, incl. temporary workers)	22.7	18.1*	6.2*	3.2	6.1*	8.4*	
Number of reportable occupational accidents (incl. temporary workers)	47	34	10	4	5	7	
Actual working hours (incl. temporary workers, in hours)	3,524,696****	n.s.	n.s.	1,113,136	n.s.	n.s.	
Hours lost in the calendar year due to accidents (excl. temporary workers, in hours)	4,848	2,640	3,816	820	1,328	4,656	
Total direct costs for employee health and safety in the calendar year (in €)	300,628	247,441	3,555***	83,289	97,134	1,316,127	

→ Footnotes • p. 0XX//

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	Spain			Singapore				
	2010	2009	2008	2010	2009	2008		
Absenteeism rate	1.1%	1.0%	0.0%	1.2 %	1.0 %	2.0 %		
Absence due to sickness in calendar year (in hours)	80	72	32	684	160	380		
Actual target working hours in calendar year (total workforce, in hours)	7,112	8,850	8,850	57,936	20,280	22,824		
Sickness rate (percentage of employees who were sick at least once in the entire fiscal year)	100.0 %	0.0%	40.0 %	71.4%	0.0%	0.0%		
Number of employees reporting sick in the calendar year	4	0	2	5	5	0		
Accident rate in ‰ (i.e. per 1,000 employees, incl. temporary workers)	0.0	0.0	0.0	0.0	0.0	0.0		
Number of reportable occupational accidents (incl. temporary workers)	0	0	0	0	0	0		
Actual working hours (incl. temporary workers, in hours)	7,032	n.s.	n.s.	n.s.	n.s.	n.s.		
Hours lost in the calendar year due to accidents (excl. temporary workers, in hours)	0	0	0	0	0	0		
Total direct costs for employee health and safety in the calendar year (in €)	618	862	666	3,613	2,300	5,250		

 $\textcircled{9} \ \underline{Footnotes} \bullet p. \ 0 X X / /$ 

		South Africa		France		Group			
	2010	2009	2008	2010	2010	2009	2008		
Absenteeism rate	3.3 %	4.0 %	5.0%	0.0 %	3.0 %	3.4%	2.5 %		
Absence due to sickness in calendar year (in hours)	264	248	256	0	140,667	139,522	91,639		
Actual target work- ing hours in calendar year (total workforce, in hours)	8,032	6,048	5,472	1,057	4,675,621	4,145,860	3,596,341		
Sickness rate (percent- age of employees who were sick at least once in the entire fiscal year)	100.0%	100.0%	100.0%	0.0%	75.7 %	79.9%	72.4 %****		
Number of employees reporting sick in the cal- endar year	4	3	3	0	1,804	1,601	712		
Accident rate in ‰ (i.e. per 1,000 employ- ees, incl. temporary workers)	0.0	0.0	0.0	0.0	15.2	14.3	8.4		
Number of reportable occupational accidents (incl. temporary workers)	0	0	0	0	51	39	17		
Actual working hours (incl. temporary work- ers, in hours)	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.		
Hours lost in the cal- endar year due to acci- dents (excl. temporary workers, in hours)	0	0	0	0	5,668	3,968	8,472		
Total direct costs for employee health and safety in the calendar year (in €)	608	0	0	0	388,756	347,737	1,325,599***		

#### Estimates and calculations:

- \* Standardization of data collection method: Reportable accident if at least 3 days are lost // figure related to employees including temporary workers
- \*\* Hours of absence declared as sickness-induced
- \*\*\* Not including data from Freiberg
- \*\*\*\* Without data from Bonn
- \*\*\*\*\* Data from previous reports have been corrected.

Absenteeism corresponds to the Absentee Rate (AR). We do not measure the Lost Days Rate (LDR) but lost hours as this parameter is more precise. As in the previous year, there were no work-related fatalities; this also applies to the joint ventures of SOLARWORLD AG. 

Human resources 2010 • p. 100// In 2010, occupational accidents, the accident rate per 1,000 employees and the hours lost due to accidents rose year-on-year. Despite comprehensive safety measures, regular staff training, training of safety officers and detailed analyses and evaluations of all accidents this trend was not avoided. A considerable share of occupational accidents were commuting accidents, partly attributabe to the harsh winter in early 2010 and at the end of 2010 in Germany. However, particularly with regard to commuting accidents, the company is basically unable to take preventative measures in advance. More internal occupational accidents were caused by non-compliance with safety instructions. In future, the

supervisors in charge and the enlarged team of health and safety officers will further intensify their efforts to advise the staff. The Occupational Disease Rate (ODR) must not be determined on a groupwide basis for reasons of data protection (explanation type 3).

For the U.S. sites, a distinction between sickness-induced absence and absence for other reasons must not be drawns since it is not permissible under U.S. law to document absenteeism for reasons of data protection. We will therefore not be able to determine these data in future, either (explanation type 3).

Absentee rates and occupational disease rates relate to the overall workforce but do not include self-employed contractors since these data are not yet collected for such staff (explanation type 2).

The Injury Rate (IR) cannot be determined since accidents are recorded for all employees (including temporary workers) whereas target working hours only relate to employees on the company's books (explanation type 2).

# /LA8/ CORE // EDUCATION AND TRAINING ON SERIOUS DISEASES

Hitherto there have been no programs of this kind in our group, nor are there any workers involved in high-risk operational activities. We have taken precautions against all kinds of hazards by means of technical inspections, personal protection equipment and training courses. The only possible hazard is due to chemicals, but this is minimized by the above methods of inspection. For purposes of documentation, we record company hygiene and conduct surveys (both of these annually). We have also taken out insurance (environmental liability) in the event of spills that might cause damage to health.

# / LA10 / CORE // INITIAL AND FURTHER TRAINING FOR EMPLOYEES

## **31** INITIAL AND FURTHER TRAINING FOR EMPLOYEES

		Group	
	2010	2009	2008
Further training expenditure* per employee (in €)	312.21	356.89***	382.13
Total further training expenditure* (in €)	741,822	713,063	697,387
Number of hours spent for initial and further training**	417,836 e	39,307 e	11,907 e
Number of training and education programs****	1,150	798	837
Number of employees having completed further training programs	2,074	1,780	1,108
Percentage of staff undergoing training per year (in %)	87 %	89%	61%
Trainees (incl. employees performing a sandwich course)	87	86	83

#### Estimates and calculations:

e: estimated

- \* We apply a narrow definition of expenditure, only including direct costs (e.g. documented in the form of invoices). Not included are the cost for training which are e.g. offered by equipment suppliers as part of an entire package. But the time for such training is contained in the number of hours indicated. In the costs indicated for the U.S. sites, the expenditure for further education of temporary employees is also included (different monitoring methods, therefore not fully comparable with the other group's expenditure).
- \*\* At the Freiberg location, the number of hours spent for training was estimated based on the information available on the individual programs as these data have not been systematically collected to date. The number of hours indicated is an absolutely reliable figure. In 2010, a program for exact calculation of the time spent was introduced at the U.S. sites (before, the figure had been estimated). In the time indicated for the U.S., the time spent for temporary employees is included, too, as this cannot be shown separately in the system for the time being. In addition, a range of trainings against e.g. harassment is compulsory. These points explain the huge increase of this indicator in comparison to the previous year. The comparability of this indicator between the sites and in the course of time is therefore unfortunately no more sufficiently given.
- \*\*\* Minor corrections in comparison to the original reporting (decimal place)
- \*\*\*\* Including temporary staff

Further training and qualification programs are offered if and as needed. Fluctuations in the course of the year are normal. As before, we again invested substantially in qualification and further training programs for our employees in 2010. Overall, the number and scope of the programs was increased, as is also reflected by a slight rise in absolute further training expenditure. By contrast, further training expenditure per employee fell slightly. The ratio of employees having completed further training programs is more or less flat on the previous year. In the U.S., the following programs were implemented in 2010: Overviews of safety and employment policies and practices; New Employee Orientation: on-the-floor training for safety and equipment operation techniques for each area and tool set that an employee may use; Additional training for employees' functional skill or knowledge as well as communication and teamwork (e.g. Robotics, vacuum, welding and other training for Maintenance Techs; statistical software training for engineers; project management training for senior professional staff; management, communications and coaching training for managers and a host of other offerings). Human resources 2010 • p. 100//
A breakdown of the data by employment category (hierarchical level, division) is not yet provided since the relevant information has not yet been recorded in this way (explanation type 2). We intend to address this issue in the mid-term.

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# /LA13 / CORE //COMPOSITION OF GOVERNANCE BODIES

# 32 COMPOSITION OF GOVERNANCE BODIES

This goes beyond the GRI requirements.

	Germany			U.S.			
	2010	2009	2008	2010	2009	2008	
Management Board/Managing Directors*	14	14	9	8	6***	6	
of which women	0	0	0	0	0	0	
of which women (percentage)	0%	0%	0%	0%	0 %	0 %	
1st tier of management	44	50	34	12	16	18	
of which women	8	9	4	1	4	3	
of which women (percentage)	18%	18 %	22 %	8%	25 %	17 %	
Other tiers of management	138	105	80	74	52***	48	
of which women	11	6	10	21	11	10	
of which women (percentage)	8%	6%	13 %	28%	21%	21%	
Non-executive staff	1,226	1,100	1,001	775	574***	543	
of which women	257	224	193**	219	158***	115	
of which women (percentage)	21%	20%	19%	28%	28%	21%	
Total workforce	1,408	1,255	1,115	861	642***	609	
of which women	276	239	207**	241	173	128	
of which women (percentage)	20%	19 %	19%	28%	27%	21%	
Employees with disabilities	29	17	14	8	12	15	
Employees with disabilities (percentage of total workforce)	2,1%	1,4%	1,3 %	0,9 %	1,9 %	2,5 %***	
Age distribution			' '				
Percentage of employees ≤30	31%	27 %***	n.s.	22 %	11 %***	n.s.	
Percentage of employees aged 30-40	31 %	32 %***	n.s.	26%	26 %***	n.s.	
Percentage of employees aged 40-50	27%	29 %***	n.s.	28%	32 %***	n.s.	
Percentage of employees >50	11 %	13 %***	n.s.	24 %	31 %***	n.s.	

 $\bigcirc$  Footnotes • p. 0XX//

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	Spain			Singapore		
	2010	2009	2008	2010	2009	2008
Management Board/Managing Directors*	2	1	2	2	2	2
of which women	0	0	0	0	0	0
of which women (percentage)	0%	0%	0%	0%	0%	0%
1st tier of management	0	2	2	1	1***	1
of which women	0	1	1	0	0	0
of which women (percentage)	0%	50%	50%	0%	0%	0%
Other tiers of management	1	0	0	2	0	0
of which women	1	0	0	0	0	0
of which women (percentage)	100%	0%	0%	0%	0%	0%
Non-executive staff	2	2	3	4	7	9
of which women	0	0	0	2	2	3
of which women (percentage)	0%	0%	0%	50%	29 %	33 %
Total workforce	3	4	5	7	8	10
of which women	1	1	1	3	2	3
of which women (percentage)	33%	25 %	20%	43 %	25 %	30 %
Employees with disabilities	0	0	0	0	0	0
Employees with disabilities (percentage of total workforce)	0%	0%	0%	0%	0 %	0 %
Age distribution						
Percentage of employees ≤30	0%	0 %	n.s.	18 %	13 %	n.s.
Percentage of employees aged 30-40	75 %	75 %	n.s.	36 %	13 %	n.s.
Percentage of employees aged 40-50	25 %	25 %	n.s.	27%	50%	n.s.
Percentage of employees >50	0%	0%	n.s.	18 %	25 %	n.s.

 $\textcircled{9} \ \underline{Footnotes} \bullet p. \ 0 X X / /$ 

	South Africa		France		Group		
	2010	2009	2008	2010	2010	2009	2008
Management Board/ Managing Directors*	2	2	2	2	28	20	18
of which women	0	0	0	1	1	0	0
of which women (percentage)	0%	0%	0%	50%	4%	0%	0%
1st tier of management	0	1***	1	2	59	70	56
of which women	0	0	0	0	9	14	8
of which women (percentage)	0%	0%	0%	0%	15 %	21%	14 %
Other tiers of management	0	0***	0	0	215	157	128
of which women	0	0	0	0	34	17	20
of which women (percentage)	0%	0%	0%	0%	16%	11%	16%
Non-executive staff	4	2	2	4	2,015	1,685	1,558
of which women	2	2	2	1	481	386***	313**
of which women (percentage)	50%	100%	100%	25 %	24%	23 %	20%
Total workforce	4	3	3	6	2,289	1,912	1,742
of which women	2	2	2	1	524	417	341**
of which women (percentage)	50%	67%	67%	17%	23 %	22 %	20%
Employees with disabilities	0	0	0	0	37	29	29
Employees with disabilities (percentage of total workforce)	0%	0 %	0%	0%	1,6 %	1,5 %***	1,7 %
Age distribution							
Percentage of employees ≤30	67 %	0 %	n.s.	17%	28 %	21%***	n.s.
Percentage of employees aged 30-40	33 %	67%	n.s.	33 %	29%	30 %***	n.s.
Percentage of employees aged 40–50	0%	33 %	n.s.	50%	28 %	30 %***	n.s.
Percentage of employees >50	0 %	0%	n.s.	0%	16%	19 %***	n.s.

#### Estimates and calculations:

- \* Individuals with more than one function are only counted once (changes versus previous year).
- \*\* The Group Report for 2008 indicated 187 women among non-executive staff in Germany. This figure resulted from a calculation error. The data concerning the number of women in the total workforce and the corresponding group figures were therefore also restated.
- \*\*\* Adjustments to previous reports.

The Group Management Board consists of 4 members (male, 3 persons 30-50 years, 1 person >50 years), who do not belong to any minority.

In 2010, our workforce in the U.S. included employees belonging to a minority: 341 (2009: 275) persons, including 132 (2009: 92) women and 209 (2009: 183) men. In Germany, we employeed 87 (2009: 86) trainees in 2010, including 15 (2009: 14) women, i.e. 17 (2009: 16) percent. Diversity is important to us at Solarworld. We promote equal opportunities throughout our group and take account of this aspect in recruitment and employment (Principle 6, Global Compact). As a matter of principle, gender is not a criterion applied – neither in recruitment nor in career development within the company. The sole criteria are qualification, work experience and personal aptitude. Key indicators of diversity and equal opportunities at Solarworld are set out in our code of conduct: Ethnic origin, skin color, nationality, religion, sex, age, sexual orientation, gender identity, marital status, physical constitution/disability and appearance. (48 \* p. S29// 48 \* p. S29// 48 \* p. S29// 49 \* Human resources 2010 \* p. 0XX// 48 \* p. S29// 49 \* Mww.solarworld.de/sustainability //

Our reporting is based on the categories of gender, disability and age distribution. However, we do not only disclose the data for governance bodies but for the entire workforce (this goes beyond the GRI requirements). Our statistics must not include all of these characteristics since many of them affect the privacy of the persons concerned and therefore must not be recorded (explanation type 3). To date, the data collected have not yet been broken down by area of activity of the individual employees (explanation type 2). We intend to address this issue in the mid-term.

Measures: In the U.S., there are required reports each year to demonstrate how the company complies with Equal Opportunity Employment and anti-discrimination laws, which are enforced by the EEOC. Solarworld develops and manages an annual Affirmative Action plan complete with reports and specific actions developed to target minority and female hiring in areas where the company does not meet local market demographic comparisons. In all areas, Solarworld has fared well, with the exception of females in some maintenance technology and management positions. This has been targeted in the 2010 Affirmative Action Plan with diversity job postings at all levels and scholarships for diversity and female candidates in a maintenance technology preparatory program through Portland Community College (PCC). Additionally, our hiring numbers in this area did improve somewhat in 2010, over 2009.

#### /LA14 / CORE // RATIO OF WOMEN'S BASIC SALARY TO MEN'S

#### 33 RATIO OF WOMEN'S BASIC SALARY TO MEN'S // IN €

		2010			2009	
Germany	Lower limit	Upper limit	Average	Lower limit	Upper limit	Average
Executives (excl. Managing Directors and Management Board members)						
Salary range and average salary (overall)	26,430	111,994	46,342	22,448	108,115	43,691
Salary range and average salary (women)	37,152	91,490	51,871	33,896	78,000	51,021
Non-executive staff	'					
Salary range and average salary (overall)	23,181	71,001	31,118	15,000	86,466	30,493
Salary range and average salary (women)	23,575	71,001	31,477	15,000	73,459	31,542
		2010			2009	
	Lower	Upper		Lower	Upper	
U.S.	Lower limit	Upper limit	Average	Lower limit		Average
U.S.  Executives (excl. Managing Directors and Management Board members)			Average		Upper	Average
Executives (excl. Managing Directors			Average 66,611		Upper	Average 67,232
Executives (excl. Managing Directors and Management Board members)	limit	limit	;	limit	Upper limit	
Executives (excl. Managing Directors and Management Board members)  Salary range and average salary (overall)	34,073	limit 113,576	66,611	32,228	Upper limit	67,232
Executives (excl. Managing Directors and Management Board members)  Salary range and average salary (overall)  Salary range and average salary (women)	34,073	limit 113,576	66,611	32,228	Upper limit	67,232
Executives (excl. Managing Directors and Management Board members)  Salary range and average salary (overall)  Salary range and average salary (women)  Non-executive staff	34,073 41,644	113,576 88,429	66,611	32,228 44,403	Upper limit  128,912  84,296	67,232

	2010			2009		
ROW	Lower limit	Upper limit	Average	Lower limit	Upper limit	Average
Executives (excl. Managing Directors and Management Board members)						
Salary range and average salary (overall)	n.s.	n.s.	44,813	n.s.	n.s.	31,000
Salary range and average salary (women)	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
Non-executive staff						
Salary range and average salary (overall)	13,373	46,000	17,505	10,937	41,358	24,993
Salary range and average salary (women)	14,226	31,150	17,099	10,937	24,815	17,876

#### Estimates and calculations:

Most of the wages and salaries we pay at our sites are based on collective agreements. Women and men covered by the collective agreement are thus paid the same salary. This applies to 53 (2009: 59) percent of our employees worldwide. We disclose salary ranges and average salaries by executive and non-executive staff and by gender. The most informative indicator would be the salary actually paid. However, performance-related bonuses and pension schemes may make a considerable difference, especially at executive level. However, we do not yet have sufficient data available to pursue that approach: It is not yet possible to show the variable remuneration element as the payroll accounting data cannot yet be linked up with employment contract data (explanation type 2). The comparison drawn up this far has been based on annual gross basic salary including holiday and Christmas pay. For staff paid on an hourly basis, we use the annual (basic) pay (excluding any shift allowances or bonuses) as the reference value. For data privacy reasons, we cannot publish this information for executives in ROW (Rest of World) since this group only includes very few employees so that the disclosures would be too transparent (explanation type 3). The remuneration structures differ substantially between the individual locations. The major differences between Germany and the U.S. may be explained by the strong differences in social security systems. In Germany (General Equal Treatment Act) and the U.S. (Lilly Ledbetter Fair Pay Act), equal rights for men and women are stipulated by law. In terms of salary ranges at U.S. sites, non-executive staff may receive a higher maximum remuneration than executive staff: In the U.S., employees with special skills and qualifications and/or a long-standing career with the company receive relatively high salaries, irrespective of whether they hold an executive position or not. The formation of employee categories (hierarchical levels, divisions) is not possible at the moment as these data have not been collected so far in the form desired by GRI (explanation type 2). We want to tackle this issue in the mid-term. The challenge inherent in this lies in the fact that some functions are very different and if averaged over the entire group, the comparison is not very meaningful.

#### /HR 1/ CORE // INVESTMENT AGREEMENTS

In the reporting period, there were no significant investment agreements with key importance in terms of volume or strategic importance for the company. As a result, there were no human rights clauses associated with such agreements, either.

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# S76 / HR2 / CORE // HUMAN RIGHTS SCREENING OF SUPPLIERS AND CONTRACTORS

There was no systematic screening of our suppliers and contractors on human rights aspects in the past. This far, this has not been a high priority because a large proportion of our suppliers and contractors has been based in industrialized countries where strict national standards apply. The suppliers' code developed in 2009, by means of which sustainability and ethical standards will form a systematic and explicit part of our cooperation agreements, is currently being transformed into process structures.

#### / HR4 / CORE //INCIDENTS OF DISCRIMINATION

As in the previous year, there were no incidents of discrimination in the reporting period.

#### /HR5/ CORE //FREEDOM OF ASSOCIATION AND COLLECTIVE BARGAINING

According to the assessment of the HR departments of the individual sites, no business operations have been identified where freedom of association or the right to engage in collective bargaining could be significantly jeopardized. However, so far no formal procedure to identify such business operations has been established (explanation type 2). We intend to address this issue in the mid-term. However, we cultivate open and direct relations with employees, which means that any such risk should be notified to us. The legislation in Germany, Spain and the U.S. protects employees against any restrictions of their rights. At the site in South Africa, we currently have only 4 employees, and at the site in Singapore only 7 employees, which favors strong participation of the individual employees in the decisions of management.

#### /HR6/ CORE // CHILD LABOR

Our business activities do not involve a significant risk of incidents of child labor or work by young people under dangerous conditions. Our processes are very transparent and are supervised via documentation in the work schedules. These aspects are also included in our groupwide code of conduct. This far, a formal procedure to identify such risks has not been applied (explanation type 2). We intend to address this issue in the mid-term.

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#### / HR7 / CORE // FORCED AND COMPULSORY LABOR

Our business activities do not involve any significant risk of forced or compulsory labor. Our processes are very transparent and are supervised via documentation in the work schedules. These aspects are also included in our groupwide code of conduct. This far, we have not used a formal procedure to determine this risk (explanation type 2). We intend to address this issue in the mid-term.

#### /S01/ CORE // IMPACT ON COMMUNITIES

We always seek open stakeholder dialog. 0 <u>4.16</u> • p. S37// <u>4.17</u> • p. S38// To date, no formal programs or systematic procedures have been established to assess and regulate the impact of business activities on the community, including the launch, implementation and termination of business operations in a community or region (explanation type 2). We intend to address this issue in the mid-term.

#### /S02/ CORE // CORRUPTION RISKS

Responsibility is in the hands of members of the Management Board and Managing Directors. In 2010, the Works Council, the Management Board and the Supervisory Board adopted the SOLARWORLD Code of Conduct. (a.e., \*p. S29// It also comprises a basis for anti-corruption policies. The establishment of formal programs, including training schemes, is a mid- to long-term task that we will continue working on in 2011. As a performance indicator (according to EFFAS/DVFA), we identify the proportion of our sales volumes in countries with a corruption index < 6.0. (a.e., \*EFFAS/DVFA\*) \*p. S15//

#### 34 CORRUPTION RISKS // CORRUPTION INDEX < 6.0

	2010	2009	2008	2007	2006
Trading Corruption Index	20.3 %	7.2 %	16.3 %	15.2 %	2.9 %
Wafer Corruption Index	47.5%	53.0 %	n.s.	n.s.	n.s.
Total Corruption Index	31.3 %	29.2 %*	16.3 %	15.2 %	2.9 %

 $<sup>^{\</sup>star}$  In 2009, the figure originally reported was 31 %. This figure was corrected.

For further information, please consult the Management Report. (a) Individual risks • p. 0XX//

# S78 /S03/ CORE // TRAINING IN ANTI-CORRUPTION POLICIES

So far, no employees have been trained in the organization's anti-corruption policies and procedures because no formal programs or systematic procedures have been established, yet. We have been pursuing this objective since 2008, but as the matter is related to adopting the code of conduct  $\textcircled{9} 4.8 \cdot p. S29\%$  this is a medium-term project for ourselves.

#### /SO4/ CORE // CORRUPTION INCIDENTS AND ACTION TAKEN

In the reporting period, a corruption incident was ascertained for the first time. The incident did not occur inside the SOLARWORLD Group but at a joint venture. According to our zero tolerance principle, we immediately drew personnel consequences and initiated a criminal prosecution.

#### /S05/ CORE // LOBBYING

SOLARWORLD conducts lobbying work in order to help solar energy become competitive and is an advocate of political funding programs. This relates for example to compensation through the German Renewable Energies Act (EEG). We supported an increase of the annual reduction of the rates of compensation in 2010 since they provide the industry with incentives to create cost reductions and quality improvements. Additionally, SOLARWORLD supported the idea of integrating photovoltaics into the RoHS Directive at European level. We are also working worldwide for free access to the electricity grid for power producers because that is a prerequisite for solar energy to be competitive with other sources of power. In general terms, we work politically for climate protection, the conservation of resources, sustainable development and ethical management. That means our lobbying activity is in conformity with our declared principles.

#### / SOB / CORE // SANCTIONS FOR NON-COMPLIANCE WITH LAWS AND REGULATIONS

No major cases of non-compliance with laws and regulations were determined in the reporting period.

#### 35 SANCTIONS FOR NON-COMPLIANCE WITH LAWS AND REGULATIONS

	2010	2009	2008	2007	2006
Sanctions for non-compliance with laws and regulations	0	0	0	0	n.s.

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#### / PR1 / CORE //IMPACTS ON CUSTOMER HEALTH AND SAFETY

Apart from the measures already indicated under other GRI items (technical inspections, etc.), there are no further systematic programs to address health and safety impacts during the life cycle of our products. There were no product recall activities for health and safety reasons in the reporting period.

#### **36) IMPACTS ON CUSTOMER HEALTH AND SAFETY**

	2010	2009	2008	2007	2006
Recalls	0	0	0	0	n.s.

#### / PR3 / CORE // PRODUCT INFORMATION

We get the components supplied from reputable manufacturers. The safety of the products we deliver is ensured by our quality management. Extensive product information is provided in the form of data sheets and assembly instructions. Product safety certification is effected via UL Listing. We exclusively use substances approved for our product under it. Starting from 2011, Sunmodule® Plus solar power modules by Solarworld are subject to checks by TÜV Rheinland. Solarworld is the first German manufacturer certified on the basis of such inspections. The "Power controlled" inspection mark documents that the rated power is adhered to and monitored by solar experts from this independent inspection service provider on a voluntary basis. We intend to integrate our whole module range into the new inspections program by TÜV Rheinland.



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The following information is included in our product labeling (i.e. for all essential products (100 percent)):

#### **37 PRODUCT INFORMATION**

Criteria	Procedure	Labeling of final products (module/system)
Origin of product components	In assessing the environmental impact, we also include the upstream process. We also assess our suppliers as required under ISO 9001. The same criteria are applied in selecting suppliers of consumables and raw materials. There is also a product information sheet for our cells.	The country of manufacture is indicated, but not the origin of individual components.
Composition	Not compulsory	Not indicated
Safe use of product	Our outgoing goods controls provide an additional check to ensure that no defective products are shipped, only products meeting customer requirements. In most cases quality assurance agreements are additionally concluded with customers.	A warning about electrical danger is included. A user information sheet (assembly instruc- tions) is included in deliveries.
Product disposal	Recycling of input products and final products is covered. It is always our goal to avoid producing defective goods.	Our products are fully recyclable and can be returned to SOLARWORLD for this purpose. However, this is not indicated on the product.

#### / PR6 / KERN // STANDARDS RELATING TO ADVERTISING

There are no written advertising-related rules of conduct or ESG standards specified for the entire organization. The SOLARWORLD Group adheres to the law in its advertising and is guided by the SOLARWORLD values (a) <a href="https://www.solarworld.de/sustainability">www.solarworld.de/sustainability</a>// e.g. fair competition, no discrimination. Compliance is continuously monitored through approval of advertising campaigns by the Management Board. We do not distribute any products that must not be sold in certain markets or are called into question by public debate.

#### /PR9/ KERN // SANCTIONS FOR NON-COMPLIANCE WITH PRODUCT AND SERVICE REGULATIONS

As in the previous year, no incidents of non-compliance with laws and regulations on the delivery or use of products or services were identified in the reporting period.

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# CONFIRMATION FOR THE DETAILS ON SUSTAINABILITY PERFORMANCE OF SOLARWORLD AG FOR CALENDAR YEAR 2010

#### To solarworld ag, Bonn

We have obtained an order for an audit review regarding the report segments "KPIs FOR ESG (core performance indicators" as well as the "Performance indicators" of the Report on Sustainable Corporate Management 2010 of SOLARWORLD AG. It is the responsibility of the Executive Board of SOLARWORLD AG to prepare the Report on Sustainable Corporate Management 2010 in accordance with the following criteria set out in the G3 Guidelines of the Global Reporting Initiative (pages 7–17)

materiality
 stakeholder inclusiveness
 sustainability context
 completeness
 balance
 comparability
 Gaccuracy
 timelinesst
 clarity and
 reliability

Our task is to provide an a confirmation for the report on sustainable corporate management on the basis of our assessment of the report segments "KPIs FOR ESG (core performance indicators)" and "Performance indicators".

We conducted the audit review on the report segments "KPIs FOR ESG (core performance indicators)" and "Performance indicators" in accordance with the German standards for the audit of sustainability reports established by the Institute of German Auditors (IDW). Accordingly, the audit review requires us to comply with professional requirements and to plan and perform the engagement in such manner that we can rule out, through critical appraisal of the facts, that the report segments have not in all material aspects been drawn up in accordance with the above-mentioned criteria of the GRI Guidelines (G3) of the Global Reporting Initiative (pages 7–17). An audit review is limited primarily to making inquiries of company personnel and applying analytical procedures and thus does not provide the assurance that we would obtain from an audit of financial statements.

In the course of our audit review, we acquired the evidence, based on assessments of risks and materiality, to obtain limited assurance that report segments "KPIs FOR ESG (core performance indicators)" as well as "Performance indicators" comply with the specified criteria of the GRI- Guideline Version 3.0 of the Global Reporting Initiative (Pages 7–17). The nature and extent of our procedures were determined, with the additional assistance of appropriate samples, by our professional judgment as to the requirements for obtaining limited assurance. The performance of our engagement included among other things the following procedures:

- Inspection of the relevant documentation, including documentation of Group principles and management and reporting structures, as well as inspection and random testing of existing documents and systems for compiling, analyzing and aggregating sustainability data
- Discussions with the team entrusted with compiling the Report on Sustainable Corporate Management,
- Discussions with employees of other Group divisions
- Acquiring an understanding of the process used to identify themes for Report on Sustainable Corporate Management in 2010
- Discussions and inspection of documents at the Bonn and Freiberg sites in relation to the sustainability data of operations at those sites.

With regard to environment data, we were able in the course of our engagement to access data and information pertaining to regular ISO 9001 and 14001 auditing.

The work we performed did not make us aware of any facts which would lead us to assume that the report segments "KPIs FOR ESG (core performance indicators)" and "Performance indicators" were not drawn up in material respects in accordance with the underlying criteria specified in the GRI Guidelines (G3) of the Global Reporting Initiative (pages 7–17).

Bonn, 11 March 2011

#### BDO AG

Wirtschaftsprüfungsgesellschaft

**Dr. Gorny** Auditor

ppa. Ahrend

Auditor



# Statement GRI Application Level Check

GRI hereby states that **SolarWorld AG** has presented its report Annual Group Report 2010 to GRI's Report Services which have concluded that the report fulfills the requirements of Application Level A+. GRI Application Levels communicate the extent to which the content of the G3 Guidelines has been used in the submitted sustainability reporting. The Check confirms that the required set and number of disclosures for that Application Level have been addressed in the reporting and that the GRI Content Index demonstrates a valid representation of the required disclosures, as described in the GRI G3 Guidelines.

Application Levels do not provide an opinion on the sustainability performance of the reporter nor the quality of the information in the report.

18 March 2011, Amsterdam



Nelmara Arbex Deputy Chief Executive Global Reporting Initiative



The "+" has been added to this Application Level because SolarWorld AG has submitted (part of) this report for external assurance. GRI accepts the reporter's own judgment for choosing its assurance Provider and for deciding the scope of the assurance.

The Global Reporting Initiative (GRI) is a network-based organization that has pioneered the development of the world's most widely used sustainability reporting framework and is committed to its continuous improvement and application worldwide. The GRI Guidelines set out the principles and indicators that organizations can use to measure and report their economic, environmental, and social performance. www.globalreporting.org

**Disclaimer:** Where the relevant sustainability reporting includes external links, including to audio visual material, this statement only concerns material submitted to GRI at the time of the Check on 17 March 2011. GRI explicitly excludes the statement being applied to any later changes to such material.

# S084 **ABBREVIATIONS**

	CF0	Chief Financial Officer
	CO <sub>2EQ.</sub>	Carbon dioxide equivalents
		Chief Operating Officer
	CSO	
(D)	DVFA	Deutsche Vereinigung für Finanzanalyse
		und Asset Management
(E)	EC	Economy
		European Federation of
		Financial Analysts Societies
	EN	Environment
	EPIA	European Photovoltaic Industry Association
<b>©</b>		Commendate the the
<b>(b</b> )	gCO <sub>2EQ.</sub> /\	NP Gramm carbon dioxide
	CHC	equivalents per watt peak Greenhouse Gas
		Greenhouse Gas Global Reporting Initiative
	6KI	Global Reporting Initiative
$\oplus$		
$\bigcirc$		
_	HSSE	Health, Safety, Security and Environment
_	HSSE	Health, Safety, Security and Environment  Institut der Wirtschaftsprüfer
_	IDW	Health, Safety, Security and Environment  Institut der Wirtschaftsprüfer International Energy Agency
_	IDWIEAILO	Health, Safety, Security and Environment  Institut der Wirtschaftsprüfer International Energy Agency International Labor Organisation
_	IDWIEAILO	Health, Safety, Security and Environment  Institut der Wirtschaftsprüfer International Energy Agency International Labor Organisation International Standards
_	IDWIEAILOISAE	Health, Safety, Security and Environment  Institut der Wirtschaftsprüfer International Energy Agency International Labor Organisation International Standards on Assurance Engagement
_	IDWIEAILOISAEIPCC	Health, Safety, Security and Environment  Institut der Wirtschaftsprüfer International Energy Agency International Labor Organisation International Standards on Assurance Engagement Intergovernmental Panel on Climate Change
_	IDWIEAILOISAEIPCC	Health, Safety, Security and Environment  Institut der Wirtschaftsprüfer International Energy Agency International Labor Organisation International Standards on Assurance Engagement
	IDWIEAILOISAEIPCCISO In	Health, Safety, Security and Environment  Institut der Wirtschaftsprüfer International Energy Agency International Labor Organisation International Standards on Assurance Engagement Intergovernmental Panel on Climate Change
	IDWIEAILOISAEIPCCISOIn	Health, Safety, Security and Environment  Institut der Wirtschaftsprüfer International Energy Agency International Labor Organisation International Standards on Assurance Engagement Intergovernmental Panel on Climate Change ternational Organization for Standardization  Joint Solar Silicon
	IDWIEAILOISAEISOIN	Health, Safety, Security and Environment  Institut der Wirtschaftsprüfer International Energy Agency International Labor Organisation International Standards on Assurance Engagement Intergovernmental Panel on Climate Change ternational Organization for Standardization  Joint Solar Silicon  Key Performance Indicators
	IDWIEAILOISAEISOIN	Health, Safety, Security and Environment  Institut der Wirtschaftsprüfer International Energy Agency International Labor Organisation International Standards on Assurance Engagement Intergovernmental Panel on Climate Change ternational Organization for Standardization  Joint Solar Silicon
① ② <b>(K)</b>	IDW IEA ILO ISAE IPCC ISO In JSSI KPIS KWH	Health, Safety, Security and Environment  Institut der Wirtschaftsprüfer International Energy Agency International Labor Organisation International Standards on Assurance Engagement Intergovernmental Panel on Climate Change ternational Organization for Standardization  Joint Solar Silicon  Key Performance Indicators
(J) (K) (L)	IDW	Health, Safety, Security and Environment  Institut der Wirtschaftsprüfer International Energy Agency International Labor Organisation International Standards on Assurance Engagement Intergovernmental Panel on Climate Change ternational Organization for Standardization  Joint Solar Silicon  Key Performance Indicators Kilowatt hours  Labor
(J) (K) (L)	IDW	Health, Safety, Security and Environment  Institut der Wirtschaftsprüfer International Energy Agency International Labor Organisation International Standards on Assurance Engagement Intergovernmental Panel on Climate Change ternational Organization for Standardization  Joint Solar Silicon  Key Performance Indicators Kilowatt hours  Labor  Megajoule
(J) (K) (L)	IDW	Health, Safety, Security and Environment  Institut der Wirtschaftsprüfer International Energy Agency International Labor Organisation International Standards on Assurance Engagement Intergovernmental Panel on Climate Change ternational Organization for Standardization  Joint Solar Silicon  Key Performance Indicators Kilowatt hours  Labor

	Non-Governmental Organizations Nitrogen oxide
P PR	Product Responsiblity
<b>(</b> ) ost	Qatar Solar Technologies
R R&D	Research & Development
SO <sub>x</sub>	Solar Energy Industries Associatiation Sulfur oxide Solar Valley Toxics Coalition
(T) tCO <sub>2EQ.</sub>	Tonnes carbon dioxide equivalents

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THE DETAILS ON SUSTAINABILITY PERFORMANCE IS ALSO AVAILABLE IN GERMAN. ONLINE VERSIONS IN GERMAN AND ENGLISH CAN BE FOUND ON OUR HOMEPAGE AT ANNUALGROUPREPORT2010.SOLARWORLD.DE/SUSTAINABILITY. ON THE WEB, YOU HAVE ACCESS TO A BARRIER-FREE PDF-FILE OF OUR REPORT.

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